The **essential** magazine for Amiga enthusiasts

Blizzard 1260
060 board for A1200s reviewed

AMIGA SHOPPER



Piracy unmasked!

At last a frank and honest report on the Amiga's secret side

Issue **60** March 1996 **£4.25**

Personal Fonts Maker 2

Plus much more – see back cover

Over 6Mb!

Amiga and PC twinned

The power of a PC on your Amiga with the Siamese System

Exclusive report on page 32

Shopper**Reviews**



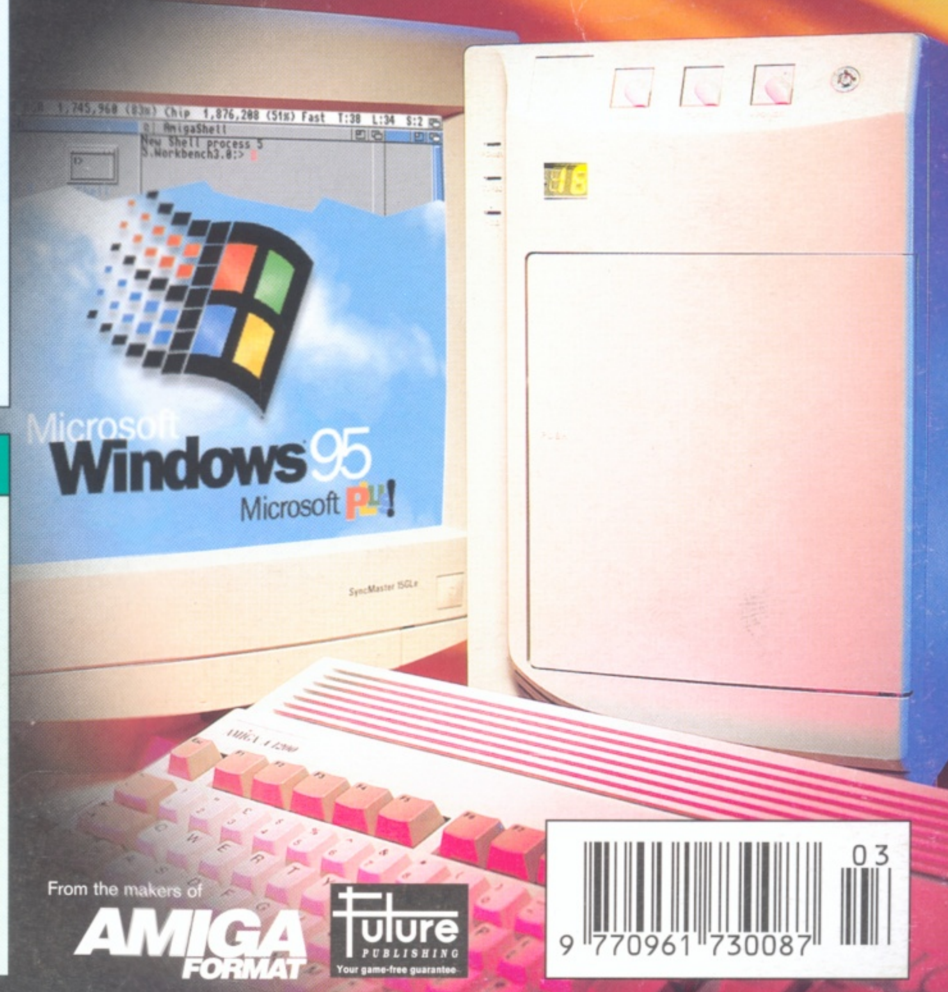
- EZ-135 drive: SyQuest have invaded the Iomega Zip drive's territory.
- MainActor Broadcast: A new version of Blittersoft's animation editor.
- Money Matters 4: Digita's new financial package.
- Datastore 2: Digita's excellent database reviewed.
- Spirit Folio Lite: Ideal addition to your DTM arsenal.
- Amiga-Link: Networking your Amiga made easy.
- Green Pen: A mouse shaped like a pen!
- JTS 850: A £200 3.5-inch drive offering 850Mb.

Shopper**Tutorials**

Music
Our brand new music tutorial begins this month. The first installment introduces the series; over the next few months we will talk about every aspect of making music on your Amiga.

Comms
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A Guide to the internet, Lans & BBS & online Services by Dale L.Larsen - This is by an ex C= member of the Amiga Networking Group. Well written comprehensive, this is a must 254 pages £11.95.

The Multi-Data Machine gives you a 4X CdRom plus a 650M removable in one half height drive. The Fourth Level software includes the advanced tools for removable media which have until now, only been available on the Mo-Miga (FLD`s top of the range 1.3Gb M.O. system). Ami-FileSafe - the new filing system which has taken the Amiga market place by storm - is also included along with with Full CDRom support.

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Editor: Sue Grant **E-mail** sgrant@futurenet.co.uk
Consultant Editor: Nick Veitch
Art Editor: Nick Aspell
Coverdisk Editor/Technical Writer: David Taylor
Contributors:
Steve Bye, Larry Hickmott, Gary Whiteley, Darren Irvine, John Kennedy, Paul Overaa, Graeme Sandiford and Maff Evans
Photography: Pete Canning
Piracy Artwork: Jason Jordache

Advertisement Manager: Tony Hickman
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Group Production Manager: Judith Green
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Print Services Co-ordinator: Janet Anderson
Paper Controller: Fiona Deane
Production Administrator: Cathy Rowland
Circulation Manager: Jon Bickley
Distribution: Sue Hartley
Overseas Licences: Mark Williams ☎ 0171 331 3920
Publisher: Simon Stansfield **E-mail** sstansfield@futurenet.co.uk
Joint Managing Director: Greg Ingham
Chairman: Nick Alexander

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Inside issue

There's a new pack from Amiga Technologies called Amiga Surfer; the World Of Amiga is being organised as we speak; and we have new products coming out of our ears...





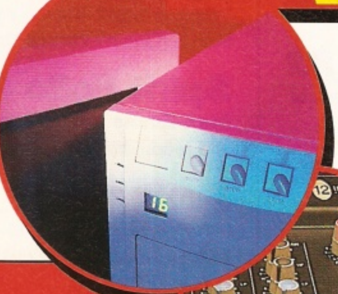


Amiga Technologies are staging the World Of Amiga show in April to "mark their commitment to the future of the Amiga", according to the press release. And Amiga Shopper will be there too, to mark our commitment to the Amiga! Ticket details can be found over on page 14.

We have had so many new Amiga products, both hardware and software, sent in that it's impossible to move in the Amiga Shopper office, so we are reviewing as many as we can in the next few issues. Instead of a huge Supertest, we have pages and pages of reviews for you!



And one piece of hardware that has been causing a real stir is the Siamese System which we previewed a while ago. Hi-Q have given us an exclusive, first look at the system, and pretty impressive it is too. The Siamese System integrates those two old enemies – the Amiga and the PC – and does it well.



Now you have chosen your new printer from the ones we covered in our printers Supertest last month, we now take a look at printer enhancement programs to go with it. Larry explains what the programs do and why you need them, then he reviews three of the best on page 28.

We also have reviews of the new networking software, Amiga-Link, the animation editor, MainActor Broadcast, the new SyQuest drive and the latest versions of two of Digita's products; Money Matters 4 and Datastore 2, plus loads more.

Piracy is a real problem for the Amiga. We talk to software developers to find out how badly they are affected. We also ask some pirates themselves why they carry on a practice which surely damages the future of the Amiga. On page 22.





Dave has also been busy reviewing over 30 new programs and utilities for PD Select this month. As for our Coverdisks, we have Cloanto's excellent Personal Fonts Maker 2, for music lovers we have a demo of Aural Synthetica, plus some rather splendid money off offers for you which are scattered about the Coverdisk instructions pages.

That lot should keep you busy until next month! ■

Sue Grant
Editor

Turn the page for the contents of issue **60**

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30 Monmouth Street, Bath, Avon BA1 2BW.
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E-mail: amshopper@cix.compulink.co.uk

EDITORIAL: Send all press releases, feature submissions and ideas to Sue Grant.
E-mail: sgrant@futurenet.co.uk

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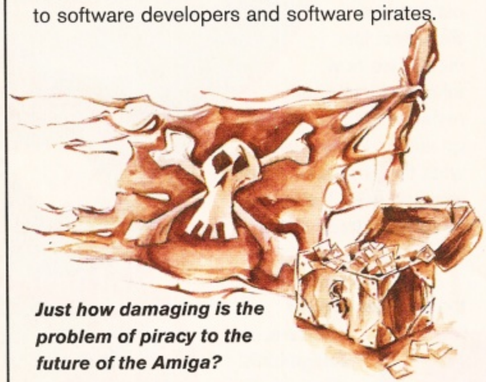
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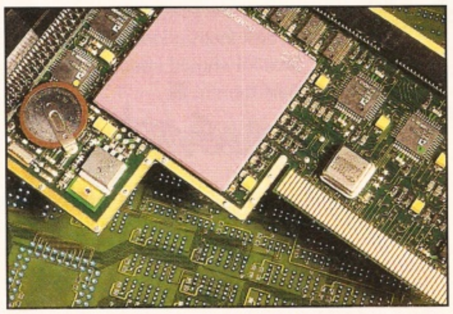
AMIGA SHOPPER

ShopperFeatures



Just how damaging is the problem of piracy to the future of the Amiga?

ShopperReviews



Could this be the fastest Amiga ever? The Blizzard 1260 accelerator board is on page 38.



SyQuest's EZ-135 drive is direct competition for Iomega's Zip drive.

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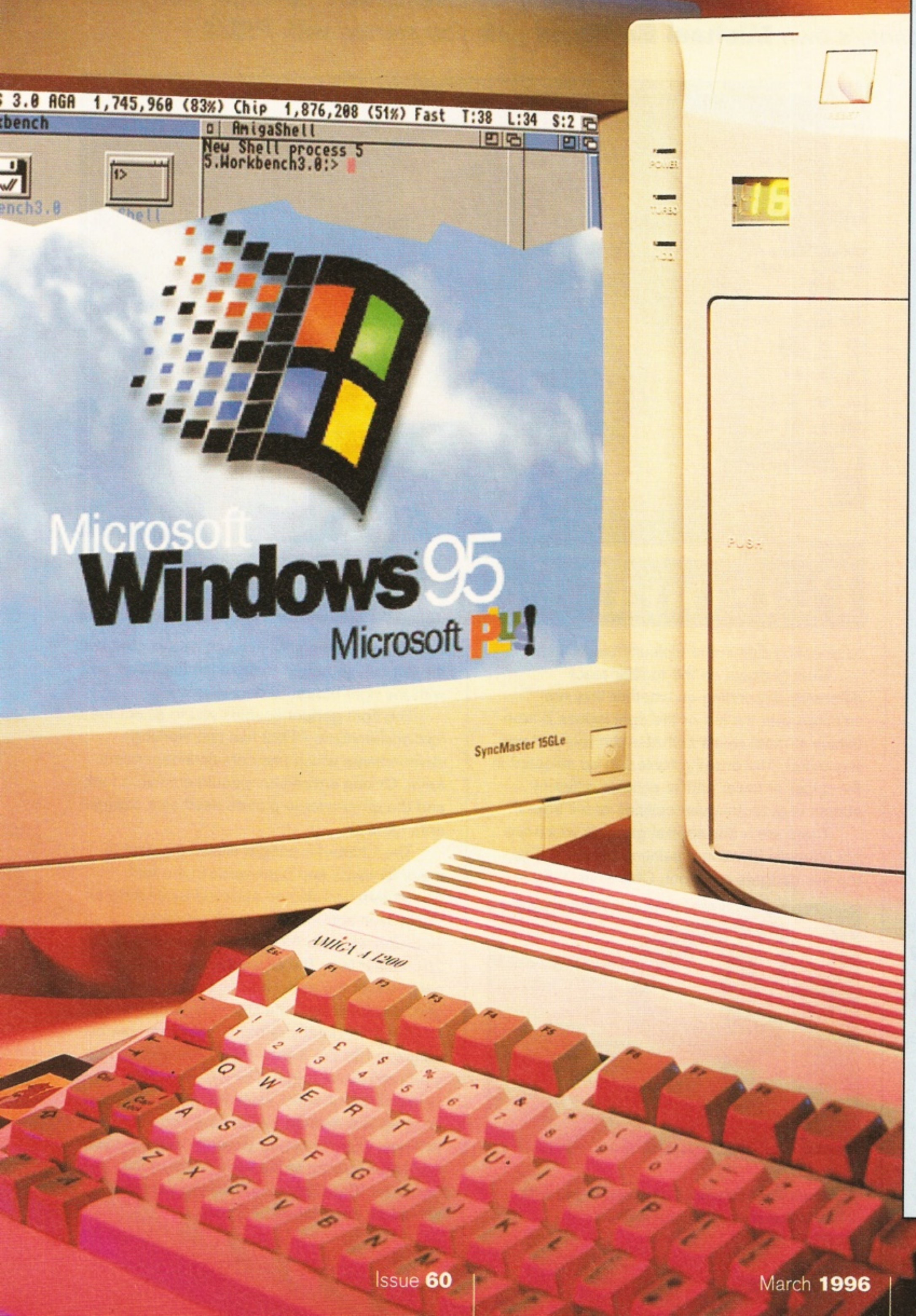
ShopperRegulars



The Spirit Folio Lite mixer will help you make music on your Amiga.

Amiga and PC twinned

Page 32



Shopper**Disks**

We have surpassed ourselves this month. You will find 6.5Mb of great new programs and utilities on our two Coverdisks:





Cover disks

Personal **Fonts Maker 2**

This month's disks put all others in the shade. Cloanto have supplied their complete program, Personal Fonts Maker 2; there's a demo of the new Aural Synthetica sample editor and a full Licenceware package, plus more. Cloanto's own ***Michael Battilana*** *gets you started with PFM2.*

Personal Fonts Maker has been acclaimed as the best bitmapped fonts editor for the Amiga by enthusiasts and professionals worldwide. It is the leading tool for handling fonts in up to 256 colours (no size limit, RTG compatible). Special functions for anti-aliasing (even using an Amiga vector font as a point of departure) and right-to-left fonts are provided, among others. This makes it an ideal companion to video applications, and a must for titling.

This Coverdisk contains a complimentary release of Personal Fonts Maker version 2.0 exclusively for the readers of Amiga Shopper. The main program is identical to the latest commercial version. Some files (such as data files, support programs and Amiga system resources) have in part been changed to fit on to a single disk. Two professional colour fonts from Kara Computer Graphics are also included.



Create your own font

PFM2 is launched with a double-click on its Workbench icon, on any Amiga with 1Mb of RAM (ideally Chip RAM). Colour fonts are supported from version 2 (or higher) of the Amiga Operating System. Amiga fonts are normally accessed through the "FONTS:" assigned path. The PFM2 disk includes the "AssignFonts" utility to reassign "FONTS:". During the work with this Coverdisk this utility can be used to reassign the path from "SYS:Fonts" to "PFM2:Fonts" and vice versa.

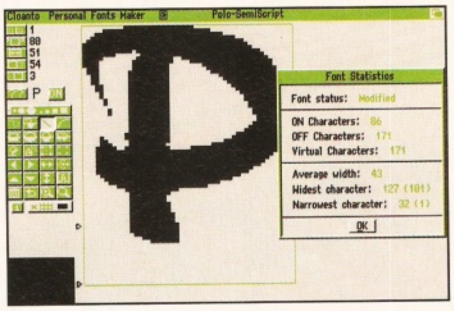
It's easy to explore Personal Fonts Maker 2 by choosing from the menus and gadgets. Make a back up copy of the disk before experimenting with functions which write data.

Because Personal Fonts Maker 2 is a result of Personal Paint development applied to fonts, many users of Personal Paint will be familiar with the toolbar and the main functions of PFM2.

Amiga fonts are loaded and saved with the Load Amiga Font and Save Amiga Font commands in the Project Menu. The format of the font (size, number of colours) can be changed from the Font Format requester, which is displayed from the Settings menu. The colour palette is edited by pressing <p> – equivalent to selecting Edit in the Colour/Palette menu.

Most gadgets on the toolbar react differently depending on whether they are selected with the left or the right mouse button (which in most cases activates the tool settings requester). The drawing tools can be selected in the upper or lower part to activate different effects (e.g. rectangular outlines or full boxes).

There are a few special gadgets which are not normally found in a painting program. The top five gadgets are: Font, Character, X Size, Space and Kerning. All five can be selected with the left mouse button to increase the value, and with the right button to decrease it.

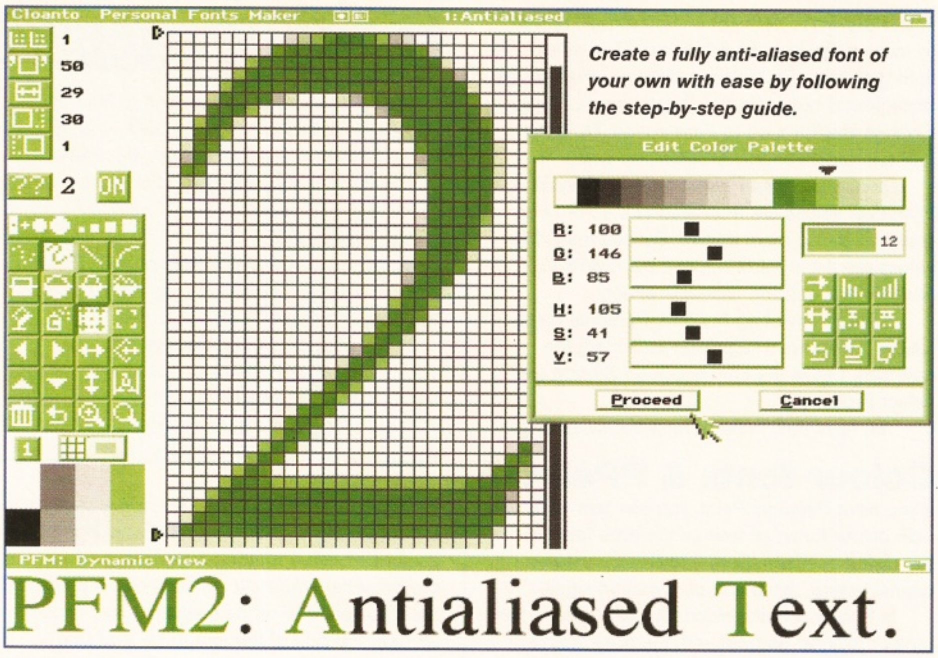


Personal Fonts Maker 2 can supply you with information about any font loaded.

The Font gadget enables you to select the font environment. PFM2 has two working environments which can contain independent fonts. Or one environment could contain a font, and the other a large picture used as a storage area for clips.

The Character gadget allows the user to move forwards and backwards in the font. Characters can also be selected by clicking on "??" which activates the quick character selection window. Amiga fonts can store up to 256 characters. The character code 256 is reserved for the undefined character, which is generally used by fonts stored in Amiga format.

The horizontal size of the character can be controlled by the X Size value. The grid can be made smaller or larger. The minimum size is 1 (one column of dots), while the grid can be as large as that defined by the Font Format settings. This parameter doesn't need to include additional spaces at the left or right of the character. The Space and Kerning parameters should be used for this purpose.



Create a fully anti-aliased font of your own with ease by following the step-by-step guide.

The Space parameter defines the logical horizontal size of the character, starting from the beginning of the bitmap. The value associated with this parameter is usually slightly higher than the X Size parameter. This parameter affects the placement of the following character.

The Kerning parameter (also called Left Offset) determines the starting position of the character when it is printed. The parameter specifies an offset from the position immediately following the last character which was printed or displayed. Negative values are allowed.

The Space and Kerning parameters don't affect the bitmap of the character. Instead, they control the horizontal spacing between the characters when several characters are grouped together to print, display or output text.

Two gadgets which appear under the Brush tool are the Memory tool and the Chop tool. Memory can be selected with the left button to copy the current character (and spacing information), and with the right button to paste it. Chop narrows the character grid, cutting off empty columns. The other gadgets move and flip the character.

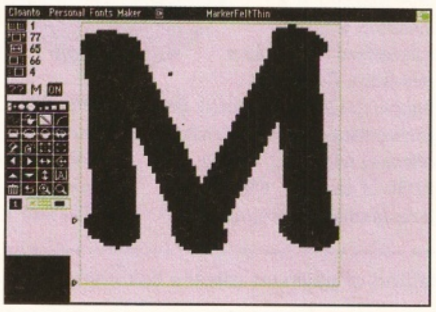
The little arrows between the toolbar and the character editing box indicate up to four reference points, which are useful when designing new fonts. These can be set by selecting a position with the left mouse button in the reference point area and by pressing a function key between <F1> and <F4>.

The box to the left of the Grid Colour tool indicates whether the font has a remappable foreground colour. Some applications can change this colour to change the font's appearance in a particular environment. To define the colour, just click on the box and then pick a colour from the palette. To disable this feature, click on the box and then click anywhere outside the palette.

A colour font in minutes

The Fonts drawer on our Coverdisk includes the colour font TenMinutes, which you can design in a few minutes following these instructions.

Select Open Amiga Font from the Project menu. From the list of fonts included with the Amiga, choose CGTimes. This is a vector font which can easily be scaled to any size. Type "55s" in the string gadget to the right of the gadget with the font name. The "s" means that the system should scale the font to a size of 55, rather than picking the font with the closest size (from the bitmaps which are already available). Press the Bold A gadget to make the font bold. If you don't have this font, pick any black and white font with a comparable size. Bold fonts are preferred in this example, because the characters will be filled.



You can load in existing fonts and edit them to suit your own needs before saving them again.

Select Font Format from the Settings requester. Move the Colours slider to 8. The font now has eight colours. Select Colour/Palette/ Load and load the "TenMinutes.col" palette which is included on the Coverdisk.

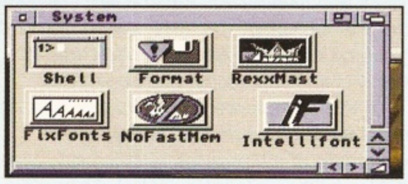
Try to set Settings/ Grid/Dots to see if you prefer this option, which affects how the characters are displayed in the editing box.

On the toolbar, click on the Fill tool with the right mouse button. This displays the Fill Area Parameters requester. Make sure the Fill Type cycle gadget indicates "Gradient". Click on the gadget with the circle until it shows four arrows inside the circle (Shape gradient type). Click on the other gadget (to its left) so that it shows an arrow with four boxes (Manual gradient mode).

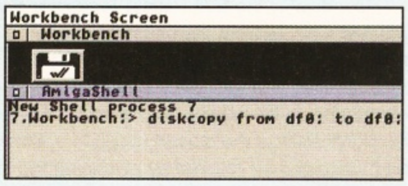
Beginners, look!



Before using either of this month's Coverdisks, please be sure to back them up – just in case. Simply follow the easy instructions below.



1 *Boot up from your Workbench disk or partition, double-click on your Shell icon – to be found in your System Drawer.*



2 *If you only have one disk drive, type in the following line and then press Return.*

```
Diskcopy from DF0: to DF0:
```

If you have two drives, place the Coverdisk in DF0: and a blank in DF1:, then type in this line instead:

```
Diskcopy from DF0: to DF1:
```

3 *Follow the on-screen prompts and remember that the Coverdisk is the source disk and the blank is the destination.*

4 *If you used the two-drive method, remember to rename the copy by clicking on its icon and pressing right-Amiga r.*

5 *If you have two drives, you can also copy the disk from Workbench by dragging the Coverdisk icon over the destination disk's.*

6 *Then place either of the Coverdisks in DF0: and reset the Amiga to boot it. It is best to boot disk 1 (or the Subs disk if you're a subscriber). This will let you install all the disks to either floppy or hard drive.*

Without leaving the requester, click on the second colour in the toolbar palette area (pale yellow box, to the right of the black box) with the left mouse button. Select the last colour (brown) with the right mouse button. Press Proceed.

Now the Fill tool can be applied to the characters of the font. Click (with the left mouse button) anywhere on each character. If you select the Settings/Dynamic View option you will be able to see how the changes affect a sample of text.

You've created a colour font!

Anti-aliased font

This example shows you how to anti-alias a black and white font, where intermediate shades of gray are used to create the illusion of a higher resolution. This effect is frequently used in the video field, and can be very useful when working

▶ 8

with a paint program, to preserve the quality of small text.

The program option used in this example is called Colour Average Resize. Activate it from the Settings/Stretch menu.

In general, to create an anti-aliased font you need to load an Amiga (possibly vector) font, add intermediate shades of gray or colour to the palette and then reduce the font size (Settings/ Font Format menu). The more colours you add, the better the result, and the smaller you can make the font with respect to the original.

In this example we will load a font twice the size of the anti-aliased font. Following the instructions of the previous lesson, load CGTimes 50, or any other font of similar size. This font does not need to be bold. From the Font Format requester (Settings menu) set the number of colours to 4.

Now display the Edit Palette requester (by pressing <p>, or from the Colours/Palette menu) and arrange the four colours so that white appears first and black last. The other two colours should be intermediate shades of gray. If you didn't change the default program options, this palette can be created by swapping the first colour with the third, and the second with the fourth. To create the intermediate grays, click on the first colour (white), then select either one of the Spread gadgets (marked with I or II) and click on the last colour (black).

Now you should have light gray characters on a white background. We want them to be black on white. In the palette under the toolbar, select the black box with the left mouse button to make it the foreground colour. Then select the light gray box with the right button to make it the background colour. In the Colour menu, select Change Background to Foreground. Now the font characters should be black on white.

Display the Font Format requester again. Whatever values are displayed in the Font size gadgets, divide them by two. For example, if the values are 44 and 50, replace them with 22 and 25, respectively. Select Proceed.

Before converting the font, Personal Fonts Maker 2 displays a requester indicating the new size. Leave the checkmark on Stretch and select Proceed.

You have now created an anti-aliased font!

Colour fonts & PPaint

If you have Personal Paint, you can test your own colour fonts, as well as the Kara fonts on the disk (KaraChiselSerif and KaraGranite – capital letters, digits and punctuation signs).

In Personal Paint, select the Text tool on the toolbar (the "a" gadget) with the right mouse button. In the font requester, type "PFM2:Fonts" in the Path string gadget. You should see a new list of fonts which includes the two fonts on the Coverdisk. Click on the font names for a preview. To use the fonts with the best colours, select the Colour/Palette/From Font menu item.

The "Personal" font

Personal Paint and the Personal Fonts Maker Colour Extensions normally share the same Personal font for their user interface. The font itself has been upgraded a few times. On a system where different versions of the programs are installed, one of the programs may expect an older version of the font to be available. While minor changes are usually backwards compatible, if any characters appear to be incorrectly displayed it is sufficient to remove the font from the system FONTS: directory. All versions of Personal Paint and PFM2 also search for the font in their local directories, where the font is copied during automatic installation. If you are still using Topaz 8 for the Workbench icon texts, you may want to try Personal 8 as a more readable replacement. ■

Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk – the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to:

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Marpet

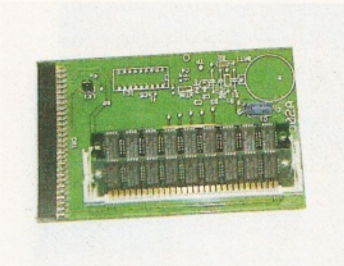
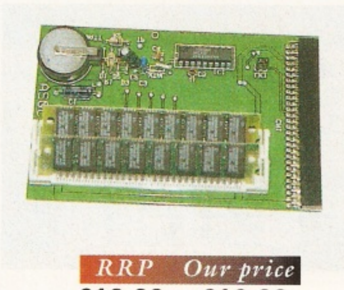
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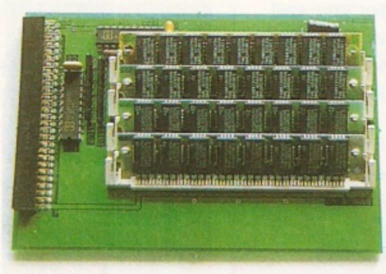
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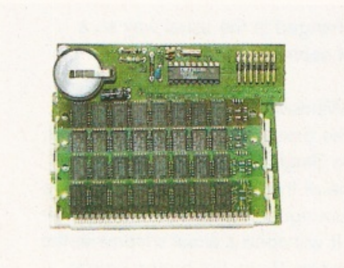
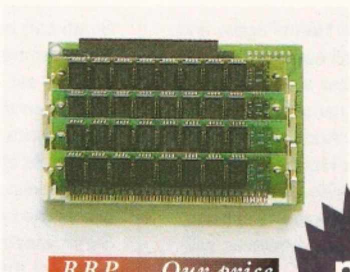



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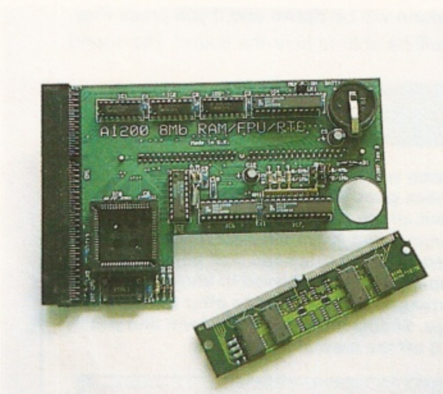
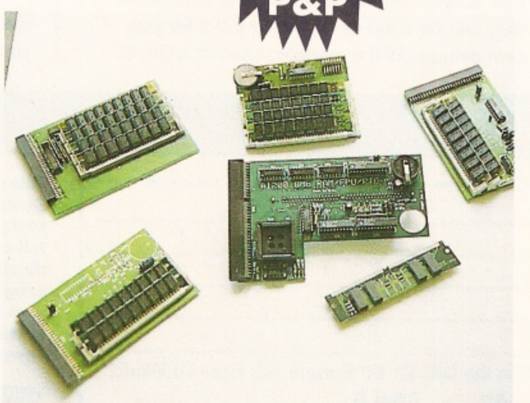
	RRP	Our price
A600 Expansion to 2Mb	£29.99	£24.99
Also available with clock	£39.99	£32.99

All prices include VAT and P&P




	RRP	Our price
External Drive (All Amigas)	£59.99	£43.99

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Uses 32bit, 72 way Simms
Built in real-time clock
Optional maths co-processor
Various configurations

	RRP	Our Price
0Mb	£59.99	£49.99
1Mb	£99.99	£85.99
2Mb	£129.99	£110.99
4Mb	£189.99	£160.99
8Mb	£309.99	£267.99
33MHz F.P.U. (and crystal)	£49.99	£38.99

Also S-port (connect CD32 to Amiga). With CD and networking software £21.99
A1200 internal real-time clock £10.99

Ring for best prices on 30 and 72 way SIMMS, hard drives, modems, mice etc and we will try to beat any genuine deal.

ACCESS/VISA welcome. 3 YEAR WARRANTY ON ALL OUR PRODUCTS!!!

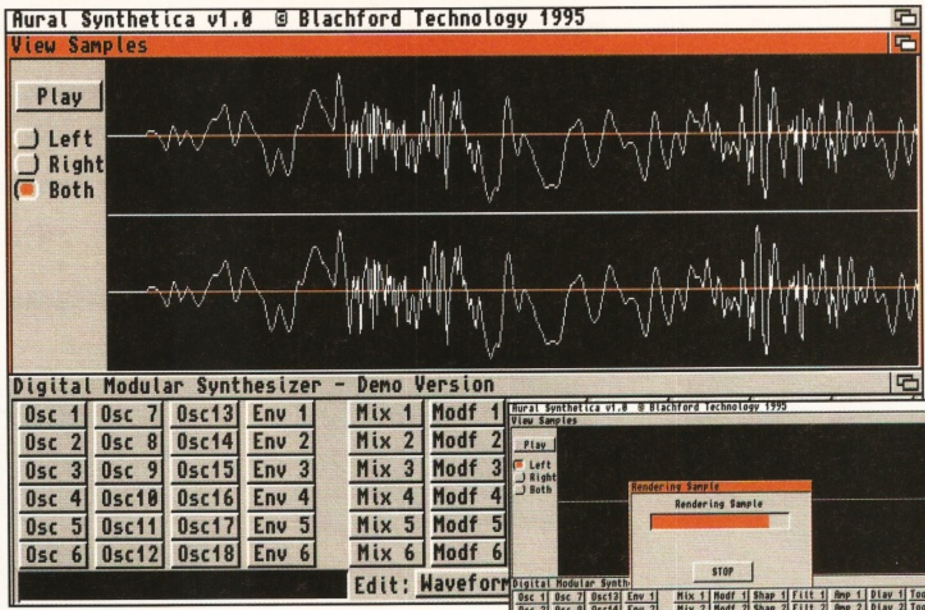
01423 712600/fax 712601

Aural Synthetica demo

Nicholas Blachford, *author of this new sample editor, gives you a tour of its features.*

Aural Synthetica is a very powerful sound creation program which uses modular synthesis design to create any number of sounds. The nature of the program makes it fairly complex, but to help the beginner some basic synthesizer setups have been added which do the setting up for you and also show you what can be done with the various modules. Because of its power, Aural Synthetica requires a minimum of 2Mb of RAM.

You will find a detailed manual on the disk in AmigaGuide format called Synthetica.guide. You should also read the StartUp document, on which this brief guide is based. This document contains some important details about loading the program.



Aural Synthetica offers you the power to change all your samples and create new ones. Each effect can be rendered and then played back.

Wave Editor

This is a large window covered with buttons and sliders, where you can create your own waves. The first thing to do is to look below the large black window for the wave slider, which will be sitting at wave 13 – this is the first user wave. The first 12 waves are the basic waves and these cannot be altered, you can view them by moving the slider from 1-12. The remaining waves 13-36 are all blank, these can be used to create your own waves.

Select wave 13, the display should be blank. Press Mix Harms and a sine wave will appear which is the same as basic wave 1. If you look on the right hand side of the window at the bottom you will see a set of vertical sliders numbered 1-128. The first is at maximum by default, select this and move it down to about halfway, then select slider 5 and move it up to about halfway. Now press Mix Harms again and a somewhat different wave will appear.

In the middle of the window at the bottom is a row of small radio buttons, named Add/Sub/Mul/>/</OR/XOR. Add is the default, but select Sub and press Mix Harms again, this will make a new wave but upside down. If you also try Mul a totally different wave will appear, the >, <, OR and XOR options, however, will create totally different waves.

Basic Synthesizers

Basic Synthesizers are Presets which have been built into the program, these allow you to create new sounds without changing the patches, or they can be used as a starting point for your own setups. All the modules used in a Basic Synth can be changed in the usual way so a large number of sounds can be generated from a single set up.

When the Window is first opened a simple display with three boxes appears along with the message "Basic Single Oscillator". To hear this sound press one of the Render buttons, there is one in the bottom right hand corner of the Basic Synth window. It will open a small window in the centre of the screen. Press the button beside MONO LEFT followed by Start Render. All open windows will then close (except View and DMS) and a small Rendering Sample window will appear. A bar will move across the window to indicate progress.

Once the calculations are complete a waveform will be drawn and if you press Play you will be able to hear the sound. The sound

Aural Synthetica special offer

Save £5!

Title ______ Initials ______ Surname ______________________

Your address ______________________________

Post code ______________ Telephone ______________________

Your signature ______________________________

Description ______________ Price ______________

Aural Synthetica __________ £25, plus 50p P&P in the UK, £1.50 Europe, £3 Rest Of World

VAT is included in all prices. Please include p&p **Total £** ______________

Method of payment (please tick one): Credit Card ☐ Cheque ☐ Postal Order ☐

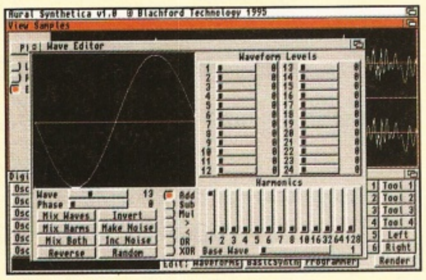
Card No: ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Expiry date: ☐☐☐☐ If Switch card, then Issue no: ☐☐

Please make cheques payable to **Seasoft Computing**. Please post your order to: **Amiga Shopper Special Offer**, Seasoft Computing, Unit 3, Martello Enterprise Centre, Courtwick Lane, Littlehampton, W. Sussex BN17 7PA. ☎ (01903) 850378.

You may photocopy this form

This demo version of Aural Synthetica gives you the opportunity to try out all the amazing features of the full program, but it has the save function disabled. When you've seen how powerful the program is, you'll be pleased to know that we've also arranged a money saving offer for the full package. Simply fill in this order form and you'll save £5 off the normal retail price.



created by Basic Synth 1 isn't very exciting, but you can make it better.

On the DMS window is a large number of numbered buttons, on the top left is one called Osc 1, press this and a big window full of buttons and sliders appears. The Window is titled Oscillator 1; it is the Oscillators which make the sound in Aural Synthetica – the other modules change the sound produced by the oscillators. The Oscillator will also have eight black boxes along the top with the first occupied with a wave. This is a triangle wave and to change the sound you will change the wave into a square wave.

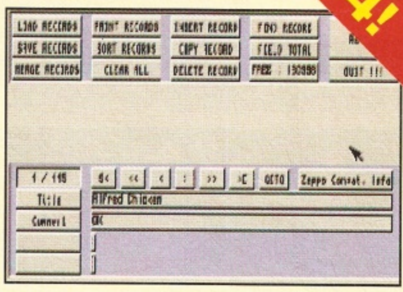
To do this you need to find the Waveform slider, if you look at where the waveform is displayed and go downwards you will find Waveform Modulation; keep going downwards you will find three sliders labelled Waveform, Amplitude and Delay. The first one labelled Waveform selects the waveform you will be changing. The value of this will be 3, change this to 2, now go to the bottom right hand corner of the DMS window and press render. Don't use the Basic Synth window because opening it will reset the waveform value.

Once the sample has been recreated, press Play and it will sound a lot louder. If you wish you can try the different waveforms to hear the different sounds that can be produced by different wave shapes, some of the differences will be big but others will sound vary similar.

Aural Synthetica is much more powerful than can be detailed here, so read the documents to find out more about all the other features included in the program.

Dialog Procs 3.6

Only £4!



As you can see, these procedures can transform your AMOS programming.

This is the complete package of Dialog Procedures 3.6 for AMOS programmers. You need AMOS to make use of it, but it will help you to incorporate fully functional button interfaces into your AMOS programs. The main advantage is that it doesn't require you to install a separate extension or address the Workbench Intuition system. It makes it easier to create fully working screens with simple command procedures.

Everyone can make use of the compiled example program included: DataMaster 3, which is a functioning database. If you are an AMOS addict, then this example shows you just how effective the package is.

You'll also be pleased to know that a brand new version of Dialog Procedures has been launched. Version 4 offers lower memory overheads, palette control, an additional procedure and full hypertext manual and more. There are full details in the docs and you can upgrade to the new version for a mere £4! Stunning!

Title ______________________
Initials ____________________
Surname____________________
Your address ________________
____
Post code __________________
Description _____ **Dialog Procs 4**
Price _________ **£3.99 + 50p P&P**
Total ____________________ **£4.49**

Please make cheques payable to F1 Licenceware. Please post your order to: **Dialog Procedures Upgrade Offer,** F1 Licenceware, 31 Wellington Road, Exeter, Devon, EX2 9DU.
☎ (01392) 493580.

You may photocopy this form

Licenceware: Nucleus demo

Save £6!

When this program appeared last month, we were so enthusiastic that in addition to giving it a Star buy, we also arranged an exclusive demo for this month's disks. This program can help you to create working front ends and custom boot screens that look completely professional – even if you don't possess any programming skills.

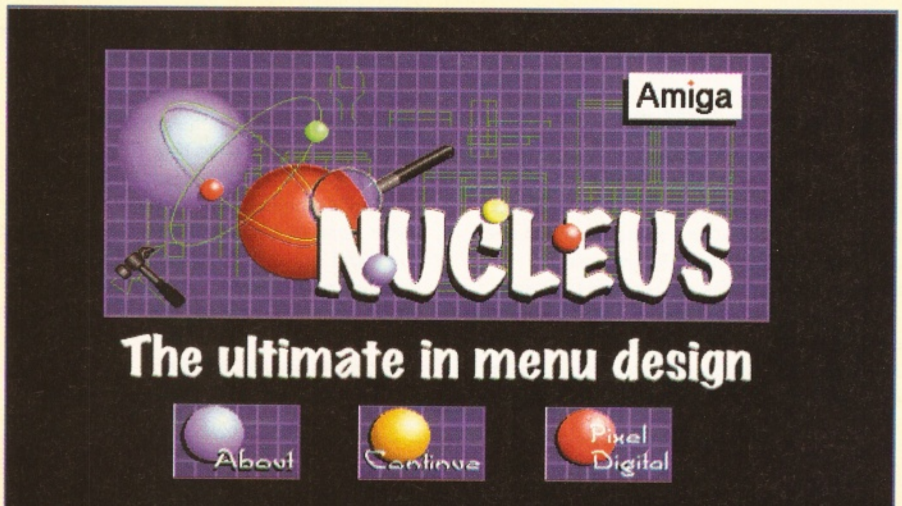
This is a fully functional version of Nucleus. The only limitations are in the number of buttons that you can place. These have been restricted to five text gadgets and five image gadgets per page. You can also import a maximum of two pictures.

You can still create full screens and multimedia-like interaction and you'll find its ease of use and results are amazing. There are some buttons included for use in your own creations and also an example window.

When you've discovered just how indispensable this program is, you'll be pleased to know that we've secured an exclusive offer for AS readers. You can obtain the full package with printed manual for only £8.99 – £6 off the £15 retail price. Fill in the form below and send it to Pixel Digital with a cheque or Postal Order for the correct amount.



The Nucleus Creator is simple to use and mouse controlled, so it's ideal for novices.



The Creator may require Workbench 3, but the executables it produces are Workbench 2 and above compatible.

Title _____Initials ______Surname ______________________
Your address ______________________________________
__________________________________Post code __________
Description ______________________________ **Price** ________
Nucleus Complete Package __________________ £8.99 (P&P included)
Please make cheques payable to J Close.
Please post your order to: **Amiga Shopper Special Offer**, Pixel Digital, Unit 6, Laurel Business Centre, 15 Laurel Road, Liverpool 7. ☎ (0151) 259 4017.

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ShopperChoice

Yes, there's yet more to come as the steam roller that is our Coverdisks continues to flatten the competition. **David Taylor** *is in the driving seat.*

ApplicationZone

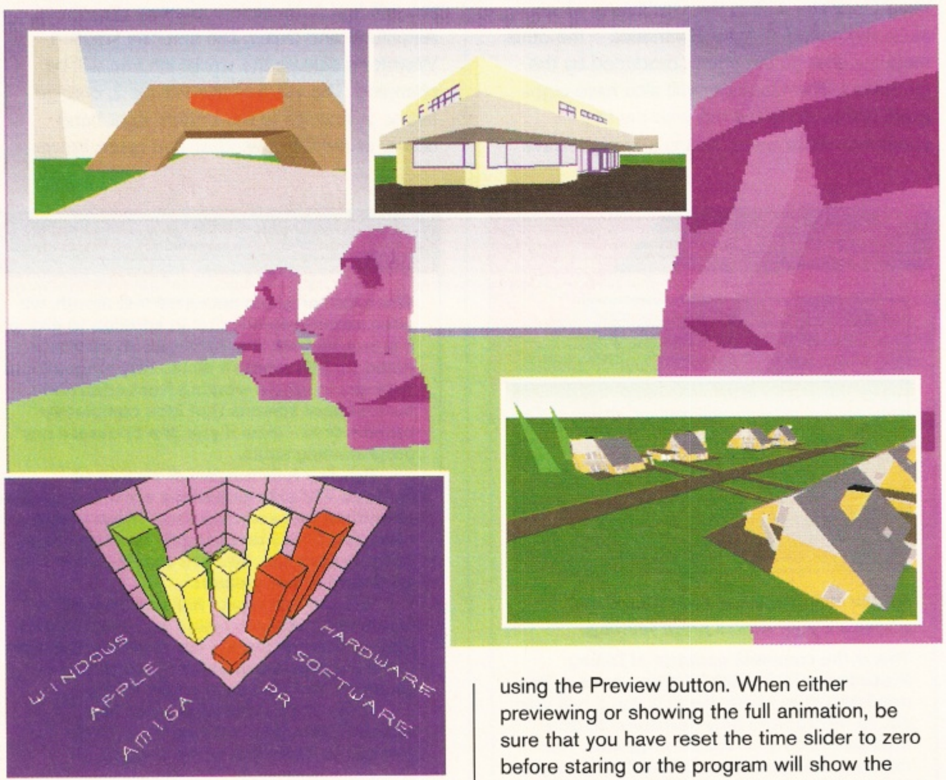
This month, in addition to everything else, we've managed to fit on all three programs from the excellent Navigator 2 package, that we rated a monstrous 99% in AS58 (losing one point for an incorrect icon). Because of the power of these programs, they all require an 020 processor or better and a 15KHz monitor or TV. A1200 owners should be fine, but A500+ users must have an accelerator.

Navigator 2

Author: Michiel den Outer

This is the flagship of the package and is an amazing Virtual Reality simulator. You'll find tonnes of worlds to explore – so many that they have to be split over two disks when you de-archive them. All you need to do is load the program and choose a world with the requester.

You can then move around the world in all dimensions using the mouse. You can rotate by moving the mouse left and right. Holding the left button down and moving the mouse up and down lets you move through the Y axis. Holding the right button down and moving the mouse up and down lets you zoom in and out, i.e. travel. You can use different combinations to slide up and sideways.



Navigator 2 has many worlds for you to explore. And a novel way of presenting data.

Navigator Titler

Author: Michiel den Outer

Although Navigator is an impressive program and one that will keep you enthralled for hours, this package also contains some programs that have a more tangible use. For example, Navigator Titler creates and animates 3D text.

Using it is very simple. In the top right of the interface is a line in which you enter your text (it defaults to "Ja"). You must press <return> after entering your text. You can then start to create your animation. You move the text using the sliders (on the right) to the position you want and then click on Create Key. This enters a snapshot of the text's position at the time on the scale at the bottom. You can then move the time slider along to where you want the next position to be and adjust the position of the text. Create another key here and then, when you start the rendering, it will move the text between the two positions, rotating and sliding it to give the smoothest possible transition.

If you want you can preview the action, using the Preview button. When either previewing or showing the full animation, be sure that you have reset the time slider to zero before staring or the program will show the animation from wherever the timer is positioned.

You can also enter a VR mode (ah, now you see the link to Navigator) and control the text as in the worlds, allowing you to position the text with the mouse, instead of using the sliders. Press Escape and you return to the interface with the text locked in position. It's a quick and easy way to create the keys.

The font can also be adjusted using the item from the Change Font menu. The backdrop can be altered by loading in different IFFs, and there are some supplied. The program has full documentation and is very intuitive. One of the best things about using this program is that the author readily admits that only the Amiga makes it possible. The amazing PC cannot handle this number of colours in S-VGA mode and the lack of a copper chip makes this program impossible.

Navigator Wiper

Author: Michiel den Outer

OK, so doing all these amazing effects with text isn't enough for you? Well, it doesn't have to be,

Subscribers disk

Despite making a set of Coverdisks against which all others pale into insignificance, our lords and masters feel that AS readers deserve more. That's why, every month, subscribers to AS receive an exclusive third disk absolutely free. Like the Coverdisks, it's easy to install and is packed with over 2.5Mb of extra stuff.

This month, for instance, subscribers get: Blitz Bank, the brilliant new finance program. Boot Utility 2, a degrader and bootblock utility; Funky, the ultimate mathematics program; Final Type and FW Tables, two excellent packages for Final Writer users; Revision Master, a program to help you learn your subject; extra buttons and example files for the brilliant Nucleus program featured on this month's Coverdisks and a melodic music module to round things off.

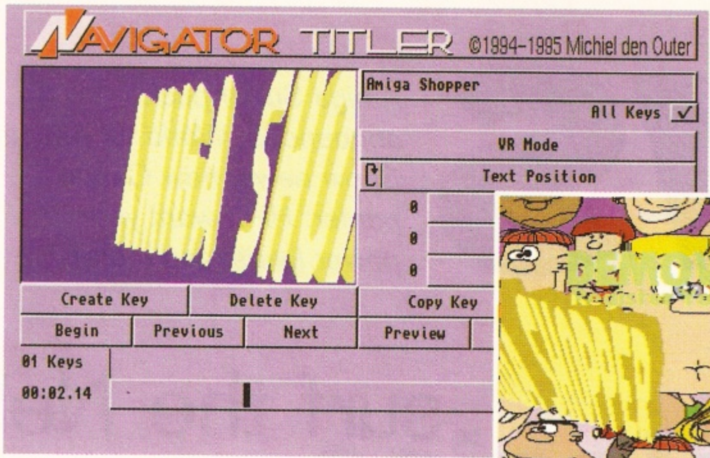


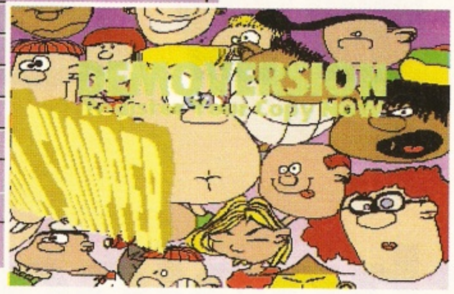
Unbelievable, isn't it? Well, you can be sure that next month and every month will be just as good. So, if you're not one already, become a subscriber – you get every issue of AS delivered to your door for less than the cover price, exclusive offers and a brilliant Subscribers-only disk every month. Call the Subscription hotline on ☎ 01225 822511.

Shareware notice!

Remember that a number of the programs on these Coverdisks are some form of Shareware. Amiga Shopper has compiled both disks with the help of the authors, who have received no fee from us.

So, if you keep and use these programs, you *must* register. Some people only want a postcard, so *please* put in the effort. They did when they created the program.





Navigator Titler can produce some amazing text animations in seconds. It can also use IFFs as backdrops.

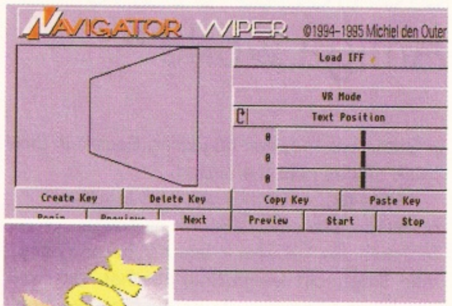
because NWiper is another amazing program that can do everything NTitler does, but uses IFF images! All you need to do is make sure that your pictures are standard 320x256 IFFs and you can quickly zip them in and out and around the screen.

There are details in the documents of all these programs on how to register. You can also read about all the functions not mentioned here and how to use the demo scripts, that provide "fly throughs" of worlds and titles. Navigator Wiper has to be one of the cheapest and most interesting programs around for video and graphics enthusiasts.

Technical**Zone**

Because it was impossible to definitively separate the types of programs this month, the Technical Zone contains programs and utilities of all types.

- **Addicon (Author: Morten Amundsen)** is a simple command that allows you to add default icons to files without any and define any default tools at the same time.
- **BBlank** and **BSprite (Author: Leu Simon Gris)** are two tiny commands that can blank the border or allow your mouse pointer to move into the border, rather than be restrained to the normal window dimensions.
- **CDX Sixer (Author: Hans Bühler)** is a utility to allow you more freedom of control over your windows. It alters the way in which you can re-size and move windows and has many options. Read the docs!
- **Flush (Author: Gary Duncan)** can flush your memory removing unused libraries and devices, but also, unlike others, gives you a report on flushes.
- **SCSIdevs (Author: Gary Duncan)** scans SCSI interfaces with a chosen device to check for peripherals attached.





Navigator Wiper offers the same options as NTitler but operates on pictures.

- **ShellBench (Author: Nick Christie)** is an essential utility that transforms the Workbench "Execute" command into the powerful option that it should have been. Amongst other things, there's now no need to type in all the long pathnames for files that you are operating on – simply drop the icon on ShellBench! The documents gives full details of all the options. Note that this program uses the bgui.library which needs to be in your libs: and is not supplied with this package. You can get it from other packages, from Aminet or a PD house.
- **Status (Author: Robert Hardy)** is a command that reports on the tasks and libraries, etc. that your Amiga is using.
- **VInfo (Author: Robert Hardy)** is an updated info command that gives you a more useful reading of disk status.
- **Whence (Author: Gary Duncan)** is a command that can check paths for commands and report which one is being used. This is very useful for people who have multiple versions of commands and need to know which one the system is using.
- **WSpeed (Authors: Mikael Nordlund & Janne Karlsson)** is a speed testing program that can run graphics tests on your Amiga and compare it with other models.
- **ZZNyYd! (Author: Finn Nielsen)** is a directory containing two commands, of which Req is the more interesting because it allows you to add a requester to any command.

Information**Zone**

Exceeding all our expectations of popularity, the Information Zone includes two guides and two ASCII files containing PD Houses and User Groups directories.

These are updated every month with new details added and are the most comprehensive listings of their type. New entries can be submitted as ASCII text files on disk. ■

Disk contributions

This month's disks were compiled using files from Aminet and from Walton's Mountain BBS (☎ 0181 891 5730), and with the help of the authors of the programs.

If you would like to contribute to a future disk, whether it's a full application, utility, 40K demo, clipart, font, 3D object, or even a module, send it to:

David Taylor,
Amiga Shopper Coverdisk Contributions,
30 Monmouth Street,
Bath, Avon BA1 2BW.

Please only send the minimum distribution archive. Also, please do not powerpack (or similar) any files because it detracts from the archiving.

3D**Zone**



There's something for everyone in the 3D Zone this month. You'll find different objects for Imagine, Real 3D and LightWave users. The Imagine object takes the form of a tutorial by Jonathan McBrien including a file that will print out the tutorial with codes on a Canon bubblejet. The Real 3D object is compatible with the version given away by sister mag Amiga Format (issue 77) and the LightWave object is the clock pictured here.

News

Amiga Surfer pack announced; World Of Amiga Show news; new Canon printer; Hi-Q want your power leads; and more!

Amiga Technologies surf the Net

Internet-specific Amiga bundles will soon be on sale, according to John Smith, the general manager (sales) of Amiga Technologies. He revealed the contents of the new Amiga Surfer pack to Amiga Shopper.

The pack will contain an A1200 with 2Mb of RAM, a 260Mb hard drive plus a 14,400 baud modem. There will also be a complete Internet bundle that will enable the user to access all the popular Internet services, such as Web surfing, ftp file transfer (new drivers, updates, patches, Shareware and Freeware), IRC electronic teleconferencing with unlimited amount of participants and E-mail with graphic, sound and animation support once the user has registered. The Amiga Surfer pack will also contain the Amiga Magic bundle of software; namely Wordworth, Datastore, Organiser, TurboCalc and Personal Paint.

The price of the pack is expected to be around £599 including VAT.

On the move

Amiga Technologies have also decided to move offices from Maidenhead to Escom's HQ in Stansted. They will be joining Escom in their plush offices near the airport.

With the move they will lose Jonathan Anderson, managing director of Amiga Technologies UK who is leaving the company. John Smith told Amiga Shopper that Anderson was leaving because of geographical reasons. Two other AT members of staff will be going too. Mr. Smith said "We will recruit as and when necessary but will increasingly utilise current resources available within Amiga Technologies group".

Amiga Technologies GmbH (UK) can now be contacted at: Hunting Business Aviation Buildings, 1st Avenue, Stansted, Essex CM24 1QQ. ☎ 01279 680617.

> "The show will **encompass** all the main elements of the Amiga world."

Show news

As we reported last month, the World Of Amiga show will take place on 13th and 14th April at the Novotel in Hammersmith, London. According to the organisers "The show will encompass all the main elements of the Amiga world including magazines, hardware, software and professional applications".

Amiga Technologies are staging the show to mark its commitment to the future of the Amiga. Amiga Shopper and our sister titles, Amiga Format and Amiga Power, will be there – so come along and meet the teams! The main features of the show include a retail area, high end applications, a games arcade, competitions and a presentation theatre. The ICPUG user group will also be there offering advice to Amiga users.

Ticket prices are £7 (adults) and £5.50 (children). For advance bookings call ☎ 01369 706346. Or send your cheques, or postal orders, made payable to The World Of Amiga, to: P.O. Box 9, Dunoon, Argyll PA23 98QQ. ■

PD developers directory

F1 Licenceware have taken it upon themselves to source a completely free directory for PD developers. The aim of the list is to give access to help for software projects for programmers and there is no charge for either participants or recipients. Once the list has reached a reasonable size, it will be distributed around the Public Domain for general use.

Although projects like this have been attempted before, the difference is that this is "a serious attempt to help Amiga developers and no profit is involved. In fact, no money is involved at all, unlike with previous efforts." So, what's the catch? Why are F1 spending their time doing this? Steve Bye of F1 explains; "The answer is that F1 will benefit from the list in the same way everyone will and that is as a source of new programmers for future F1 titles and that's it". Nobody goes on to the list without their knowledge, so it is a case of getting in touch to get your name and details added. The list will also accept "wanted" notices. All you have to do is send in your details and skills, whether you're a coder, musician, graphics artist, writer or playtester.



Obviously, F1 are still accepting actual programs for free evaluations for inclusion in their Licenceware catalogue.

F1 Licenceware can be contacted on ☎ 01392 493580/fax ☎ 01392 438802, or E-mail at steve@dcandy.demon.co.uk. Their snail mail address can be found in the PD Directory in the InformationZone on our Coverdisks – see page 13 for details.

New from Canon



The Epson Colour Stylus and the H-P DeskJet 850C have another rival to contend with. The Canon BJC-610 bubblejet printer is the new kid on the block. It has a maximum resolution of 720dpi, which should produce pretty high quality prints.

Larry Hickmott used the BJC-610 to test the printing enhancement packages that he reviews in the feature on page 28. He will also review the 610 next month, so you'll have to wait until then to see how it performs with an Amiga.

Trouble with output

Amiga Shopper is getting quite a few calls from people wanting to have their pictures and text printed out in colour. Companies that used to advertise this service seemed to have either stopped or withdrawn the service. The requested output appears to range from anything to top-quality lasers. Amiga Shopper would like to hear from any company that does offer these services, so we can pass the details on to our readers. You can send details to the editorial address and contact our advertising staff on ☎ 01225 442244.

Dual price drop

The Panasonic Dual Drive offers both the power of a quad-speed CD-ROM and a 650Mb re-writable cartridge. The PD drive was reviewed in AS54 and rated 80%, mainly because it's a very cheap way of storing Gb after Gb.

The price for the drive has now dropped from £600 to £529.95, with 650Mb cartridges now costing £50. For a very limited time though, Amiga Shopper readers can save a further £30 and obtain the drive for £499.99!

Hi-Q are also dropping the price of their excellent desktop PowerStations, which received a Star buy in AS51. The casings which can house up to five SCSI devices are now available for little more than a casing for a single device. The price for the PowerStations which also power Amigas is now £89.95, as long as you send in your original power lead, while the price of standalones is a further £10 cheaper at £79.95. The packs, which are now upgraded to include a faster Sony CD-ROM drive and the new Surfin' Squirrel, instead of the standard one, will be kept down to the original price of £99. For more details contact Hi-Q on ☎ 01525 211327.



New prices for both this drive...



...and the popular PowerStation.

Titbits

Free User Group

If you are new to the Amiga, or even an expert, you can now find solutions to your problems, buy, sell or swap Amiga kit, or just have a chat – for free. And all because Pro-Soft have launched a new User Group. The group will operate by post as a bi-monthly disk magazine and Pro-Soft promise they will organise some special offers for the members too.

To join, just send a blank disk, an S.A.E. and your name and address to: Pro-Soft, P.O. Box CR53, Leeds LS7 1XJ.

Design of the times

If you need illustration or design work done for your projects, why not try out Artwork's new studio services – they are now offering a custom design service for Amiga owners. Their artists can produce original illustrations, or even create high quality computer images from your designs. All the designs are supplied on disk as bitmapped or fully scalable vector images in colour or black and white and in a wide variety of formats, including IFF and EPS.

Prices for designs start at £20. More details from Artworks ☎ 01469 588138.

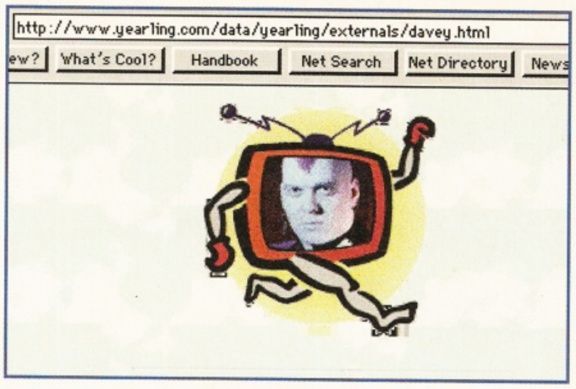
Support for the future

Pro-Soft are so confident in the success of the Amiga's phoenix-like rise from the ashes that they have decided to scrap all ideas of producing PC software and they will now be concentrating on Amiga stuff. They already have six new programs in the pipeline for 1996, including more of their famous gambling programs – they also plan to branch out into lifestyle/business applications.

For further details contact Ali Prior at Pro-Soft, P.O. Box CR53, Leeds LS7 1XJ.

On the move

Gasteiner Technologies are moving to bigger and better premises, to further improve their service. You can now contact them at: 18/22 Sterling Way, North Circular Road, London N18 2YZ, or give them a call on ☎ 0181 345 6000.



Wavey Davey

Long-time readers of Amiga Shopper will remember the colourful character of Dave Winder who used to regularly contribute a Comms tutorial for us, among other things. Well, Wavey Davey – as he is more commonly known – can be found writing for The Yearling Interactive TV Guide on the Net. He is there to review the best and the worst of TV programs. If you want Mr. Winder's advice on your viewing, point your browser at: http:/www.yearling.com

Siamese **reveals all**

Hi-Q have affirmed their willingness to disclose the workings of the library system that their new Siamese System uses to companies who produce software. The idea is that it will enable them to write PC runtimes for their programs, allowing the Amiga's front-end to use the PC runtime and processor and gain massive speed increases. For companies that already have their product on both platforms, like Real 3D, Imagine or LightWave, this would mean an easy way of offering new upgrades to Amiga users. Other companies who have toyed with converting their programs to PCs could also do this much more easily because they would not have to worry about creating a new front-end, only the executable code.



AMIGA POWER

Hello again. Due to the farcical nature of your magazine's 13-issue schedule, we find ourselves speaking once more of February's AMIGA POWER. Fortunately, none of the games we thought we'd have turned up so this bit is excitingly fresh.

AMIGA POWER 58 contains reviews of Breathless, Extreme Racing, Pinball Prelude and Airbus 320 2, while the ensnaringly spectacular Coverdisk game Super Foul Egg is now joined by demos of said pinball sim and a new golf game in which your player belabours himself with clubs. It will still be available from Thursday, 25th January, but now in a new, conveniently-foldable buff-coloured pocket edition.

Your pals
AMIGA POWER

AMIGA FORMAT

Whoooooosh... There are some things that can never go fast enough – motorbikes, modems, floppy disk accessing, wet Sundays, family reunions – and your Amiga. That's why the next issue of Amiga Format is dedicating a special feature to accelerator cards – why you might want one, what they do for you and most importantly which one is best for you. We will be including an exhaustive test of the very latest A1200 060 accelerator too, as well as the more economical models. Data burst mode active: downloading additional information... Final writer Coverdisk10100Digital universe10010101 MMexperience00101010XtremeRacing1001001Arex x 100101001Amiganet01010111 on sale Feb 15th... link disconnected...

Nick Veitch
Editor, Amiga Format

Tit**bits**

Get blitzed!

We mentioned the new Blitz BASIC User Group in our letters pages last month. They are still on the lookout for new members. If you are interested in joining get in touch with Matthew Tillet at 27 Hillside Avenue, Worlingham, Beccles, Suffolk NR34 7AJ.

Our HiSoft BASIC tutorial will be starting one month earlier than we planned. The first instalment will be in our April issue.

CD mastering

A Canadian company have produced a professional CD-R mastering package for the Amiga. MasterISO allows the user to control a CD-R drive and create custom CD-ROM and CD-Audio disks.

MasterISO's features include the ability to create ISO 9660 compatible volumes; it can handle ISO 9660 Level 1 and Level 2 filenames, it can also take files from multiple sources and combine them into a single volume. MasterISO generates volume image to a DOS file or direct to a SCSI hard drive and it uses AIFF, MAUD and CDDA 16-bit audio files.

We will be reviewing MasterISO as soon as we can get our hands on a copy. However, if you want more information now, contact Asimware on (Canada) ☎ 001 905 578 4916.

Amiga Shopper's mail order buying guide

To make buying by mail order as easy and as safe as possible, Amiga Shopper has put together the following top 10 tips to buying mail order products:

1 Before you send any money for goods, telephone the supplier to make sure that the item you require is in stock.

Ask questions about the mail order company's policy on delivery and returns of faulty equipment. Make sure there are no hidden costs such as postage and packing. Find out when you can realistically expect to receive your goods.

2 Always read the small print on advertisements.

3 Beware of companies that do not include their address on their advertisements. Avoid companies which do not answer or return your telephone calls.

4 Pay by credit card where you can. If you are ordering goods of more than £100 in total value, you are legally entitled to claim compensation from some credit companies if the retailer goes bust. Check your credit card company's policy. You can also try to get extra insurance in advance.

5 Always keep records. If you are buying by credit card, keep a note of the time of the order and ask for an order number. When ordering anything over the telephone, always double-check the price.

6 If you are not paying for the goods by credit card, pay by cheque instead. Never send cash through the post, and avoid using postal orders.

7 If you are sending a cheque, keep a note of the cheque number, the date and the exact value. Make sure you know the exact name of the mail order company too.

8 When you receive your goods, check them carefully. If anything is missing or faulty, contact the supplier immediately.

9 Always order goods from the most recent issue of Amiga Shopper.

10 If a problem arises, contact the supplier in the first instance. Calmly and politely tell them your problem. Most problems turn out to be minor hitches or misunderstandings that can easily be resolved without taking the matter further.

If you think you have a grievance, contact your local Trading Standards Officer. The number is in the phone book.

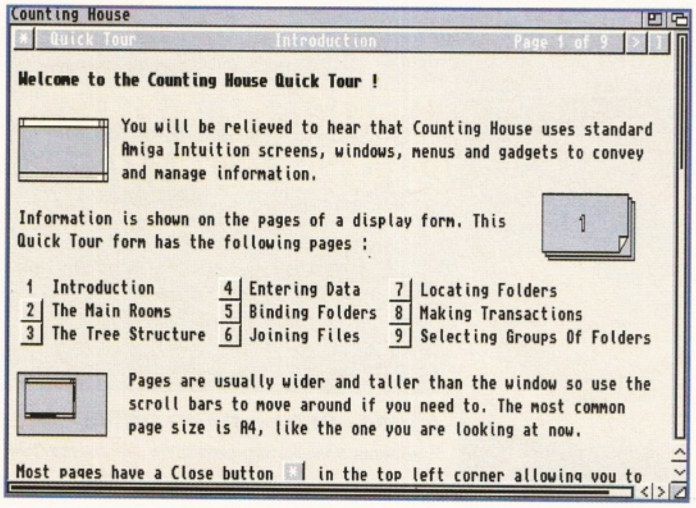
Counting by numbers

Information is power, and now you have the means to manage your information with Ark's new Counting House software. Counting House consists of seven virtual rooms containing filing cabinets. Each cabinet contains folders which hold documents with information on them.

The two versions of Counting House: Cash and Cash & Credit both include features such as accounts routing generating a trial balance, a trading profit and loss report and a balance sheet; an address label manager; cash order processing; data export and import; mail merging; graphic form dumps; multimedia file linking and presentation – there are too many of them to mention here. There are also over 2,000 help and tutor files provided, so you should have no trouble working out how to use the program effectively.

The Cash version of Counting House costs £59.95 and the Cash & Credit version is £99.95. Both versions need an Amiga with 3Mb RAM, Kickstart 2 or later ROM, and a hard disk with 6Mb of free space.

For further details contact Applied Research Kernal on ☎ 01983 551496, or E-mail them at richard@ark.co.uk. We will have a review of Counting House next month.



Free PD!

Members of the Independent Commodore Products Users Group (ICPUG) can receive a wide range of Amiga PD for free, all they have to do is send their floppy disks and return postage to the group.

The ICPUG Public Domain libraries include 1,100 disks from the Fred Fish library, 250 disks from the Scope library and 300 disks from their own Amiga library. Members of the group also receive a regular journal and there are technical support helplines available too.

For details of ICPUG membership write to the Membership Secretary, Tim Arnot, 17 Colne Drive, Oakfields, Didcot, Oxon OX11 7RZ. For any other information about ICPUG contact them on ☎ 0181 651 5436, or E-mail jbickerstaff@cix.compulink.co.uk

Save £££s

Soft-Logik have reduced the cost of PageStream 2.2 by a massive $260! They are now selling the program for $39, which is only £24.

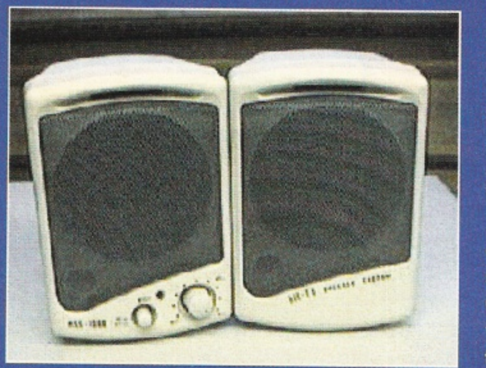
There are no changes to the program from when it was first released, but PageStream 2.2SE now has a new 100-page manual; five disks and 47 fonts are included with the program. And if you buy PageStream 2.2 and then want to upgrade to PageStream 3 you will save $39 off the normal price.

For further information contact Soft-Logik on ☎ 001314 256 9595.

Leading speakers

Hi-Q are still in search of redundant power leads. All they want is the part that leads from the power box to the Amiga and they don't even care whether the power box is working. In exchange for this lead, they are willing to give you a free pair of speakers.

The leads are needed for the assembly of their PowerStations.



So, if you've got a spare or broken power lead, or if you've bought a PowerStation and no longer need your power lead, you can exchange it for a set of speakers. Call Hi-Q on ☎ 01525 211327 for more details.

Cheaper laughs

Comedy Review is a new! free! nude! chocolate! national comedy magazine which, should you possess even the vaguest evidence of a SOUL or a SENSE OF HUMOUR, you will be desperate to own immediately.

Comedy Review covers absolutely every melon-freakin' aspect of comedy, including TV, stand-up, books, films, and theatre. It's full-to-death of features, reviews, interviews, and... some... other things that you find in magazines. But – it's much, MUCH more than that. It's £3. And so, as we here at Amiga Shopper are the best people in the world ever, you can, by taking the coupon on the right into a branch of WH Smiths or John Menzies, get a startling ONE WHOLE POUND off the first issue. Yes. That means you can buy the FIRST EVER ISSUE of a BRILLIANT NEW COMEDY MAGAZINE for a MEASLY TWO POUNDS! AND NOT THREE POUNDS. Do you see?



CLOCK CARTRIDGE

Our unique and highly rated external Clock Cartridge will enable your Amiga to continually store the correct time and date in its own battery backed memory.
Simply plugs onto the back of the Amiga and does not invalidate the warranty.
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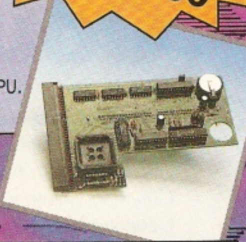


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A1200 trapdoor fitting memory expansions feature a battery backed clock and a socket for an accelerator FPU.



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A500 & A500+ HARD DRIVES



These hard drives simply push onto the side of the A500 or A500+ and will give your computer all the benefits that hard drives offer. The drives are supplied formatted, partitioned and have Workbench installed for immediate use.
Full instructions and software supplied.
The hard drive also has the facility to add 2, 4, 6 or 8mb of RAM inside It.

A500/+ 250mb HARD DRIVE £209.99
Additional RAM for the hard drive £89.99 per 2mb

DATAFLYER SCSI+

Now includes CD ROM drivers and instructions.

The Dataflyer is a 16bit SCSI II controller card that converts the signals on the internal IDE interface to also run SCSI devices at the same time as the IDE hard drive.



The Dataflyer SCSI+ will operate up to 5 SCSI devices such as CD ROMS, hard drives, SyQuest removable drives, tape back up drives etc.
Unlike other SCSI interfaces, the Dataflyer SCSI+ is compatible with all known accelerators etc and it does not stop you from utilising any of the important expansion ports on your A1200/A600.
The Dataflyer SCSI+ easily installs into the A1200/A600 (simply pushes in, no need to remove the metal shield) and provides a 25 way D connector through the blanking plate at the back of the A1200.
Full instructions and software supplied.

DATAFLYER SCSI+ ONLY £69.99
SQUIRREL SCSI INTERFACE ALSO AVAILABLE £59.99
PCMCIA fitting SCSI interface

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Discology is the ultimate in disk copying power for the Amiga. The package comprises the Discology Disk, manual and Discology cartridge for making copies of heavily protected programs with an external disk drive. Discology will also format disks, check disks for errors etc.
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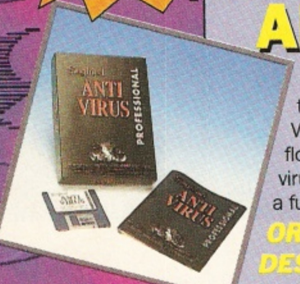
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THE ULTIMATE REMOVABLE DRIVE

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ANTIVIRUS



Anti Virus Professional is the most powerful tool for detecting and removing viruses. Anti Virus pro will check and device hard drives, floppy disks and *even CD ROM drives* for viruses. Very straight forward to use, includes a full 50 page manual.
ORDER NOW BEFORE A VIRUS DESTROYS YOUR SYSTEM !!!
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DATA FLYER 4000SX

A4000 SCSI controller expansion card that allows up to 7 SCSI devices to be connected to the A4000. Includes full user manual and installation software including CD ROM drivers. Includes connecting cable for internal SCSI devices and rear mounting bracket with a 25way connector for external devices.

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72 pin SIMMS suitable for Apollo accelerators, A4000, A1200 memory expansions etc.

1mb £39.99
2mb £77.99
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33MHz 68882 FPU (plcc) £49.99
40MHz 68882 FPU (plcc) £69.99
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All FPU's are supplied with crystal oscillators

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ASIM CDFS 3.0

This superb package is a must for any CD ROM user. Includes CD32 & CDTV emulation, audio CD player software including librarian features, direct reading of 16bit audio samples, full support for Kodak and Corel PhotoCD Discs. Includes the 'FISHMARKET' CD ROM disk packed with public domain Fred Fish disks and a huge 115 page information packed spiral bound manual.

ASIM CDFS ONLY £49.99

ZIP DRIVES



Highly rated SCSI drive will store 100mb per cartridge. Comes complete with power supply, SCSI cable, instructions and cartridge.

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100mb ZIP cartridge £15.99

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Our highly rated, top quality feature packed modems are ideal for Amiga users. All modems include our **FREE MODEM ACCESSORIES PACK (worth £19.99)** which includes a cable to connect the modem to the Amiga, NCOMM comms software, Amiga Guide to Comms and a list of Bulletin Boards from which you will be able to download vast amounts of free software as well as have access to E-MAIL facilities.



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SPEEDCOM+B (14,400 V32bis) £79.99
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Our high speed 2.5" IDE hard drives for the Amiga A1200 & A600 computers come complete with fitting cable, screws, partitioning software, full instructions and 12 months guarantee. All drives supplied by us are formatted, partitioned and have Workbench (WB2 for the A600 and WB3 for the A1200) installed for immediate use. Fitting is incredibly simple; if you can plug the mouse into the mouse socket, you will be able to plug the hard drive into the hard drive socket.



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Double speed CD ROM DRIVE complete with power supply, SCSI cables, docking station and full instructions. Also includes stereo headphones and carrying case for use as personal CD player.



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QUAD SPEED CDROM DRIVE

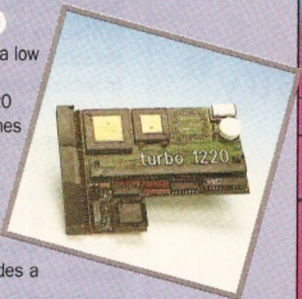
Amazing value quad speed external SCSI CD ROM drive in a top quality enclosure.

SANYO QUAD SPEED EXTERNAL WITH SQUIRREL OR DATAFLYER ONLY £239.99

APOLLO A1200 ACCELERATORS

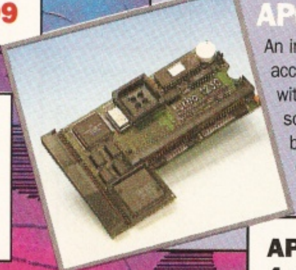
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Amazing power for such a low price. This superb accelerator uses a 68020 running at 28Hz and comes complete with a 68882 FPU to enable your A1200 to run at 5 MIPS (million instructions per second)! Uses standard 72 pin SIMMS and includes a battery backed clock. Simple trapdoor fitting.



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An incredibly powerful trapdoor fitting accelerator based around a 68030 complete with MMU, 2 SIMM sockets (72 PIN SIMMS), socket for a floating point unit and battery backed clock. Runs at just under 9.5 MIPS (million instructions per second!)

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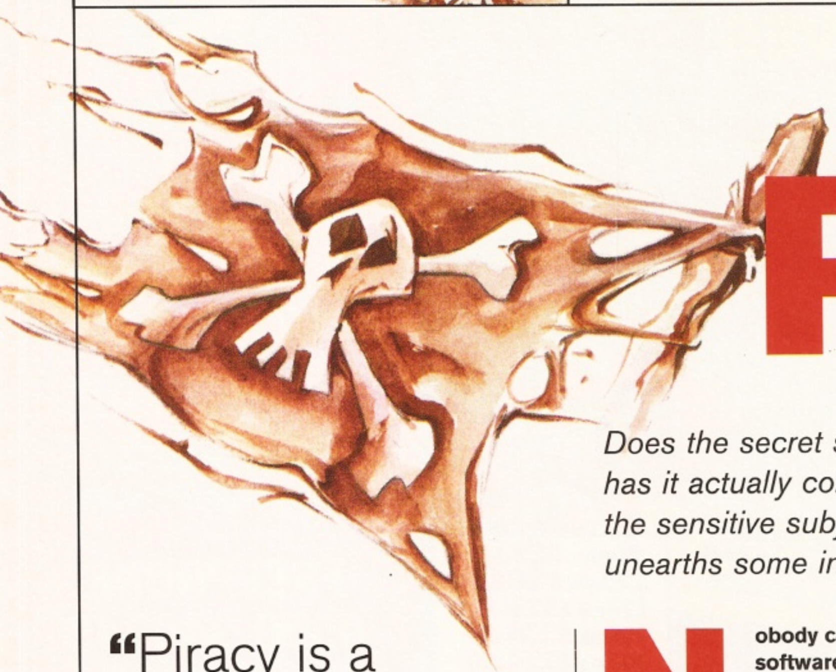
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All prices include VAT. Postage and packing will be charged at £3.50 per order (UK), £7.50 Europe and £12.50 rest of the world.



unmasked! Piracy

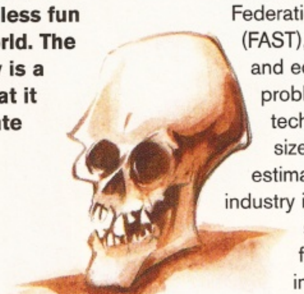
Does the secret side of the Amiga harm the machine's future or has it actually contributed to its survival? **David Taylor** *tackles the sensitive subject of software piracy, talks to all sides and unearths some interesting ideas.*

> "Piracy is a multi million pound industry... it exceeds the size of the **legitimate** software industry."

Nobody can claim that software piracy is legal, but surprisingly, every side involved in this area thinks that they are right. Many people think that piracy is harmless fun with little impact on the real world. The truth of the matter is that piracy is a multi-million pound industry, that it exceeds the size of the legitimate software industry and that it threatened to spark off an international trade war.

The Entertainment and Leisure Software Publishers Association (ELSPA) has recently broken a piracy ring which they claim was draining £100 million a year from the software industry. These phenomenal sums of money are ironically linked to the rise of the media that they claimed would save the market from piracy, the CD-ROM.

When the CD arrived on the market a few years ago, the fact that it couldn't be duplicated cheaply and contained too much material to be copied to floppy disks, meant that publishers hailed it as their saviour. However, the price of CD-R, the recording equipment that allows the creation of gold CDs (i.e. CD originals) has dropped from tens of thousands of pounds to a matter of hundreds. Instead of being the death knoll for pirates, it has provided them with a way of distributing copies even more cheaply.



Geoffrey Webster, chief executive of the Federation Against Software Theft (FAST), says, "Piracy of software, games and educational data is a major problem for publishers and knows no technical/hardware boundaries. The size of the problem has been estimated at £600 million lost to the industry in 1994. (43 per cent of total sales.) We and ELSPA have found that cartridges and increasingly CD-ROMs are the subject of piracy through copying and counterfeiting. There isn't a technology that is immune or safe."

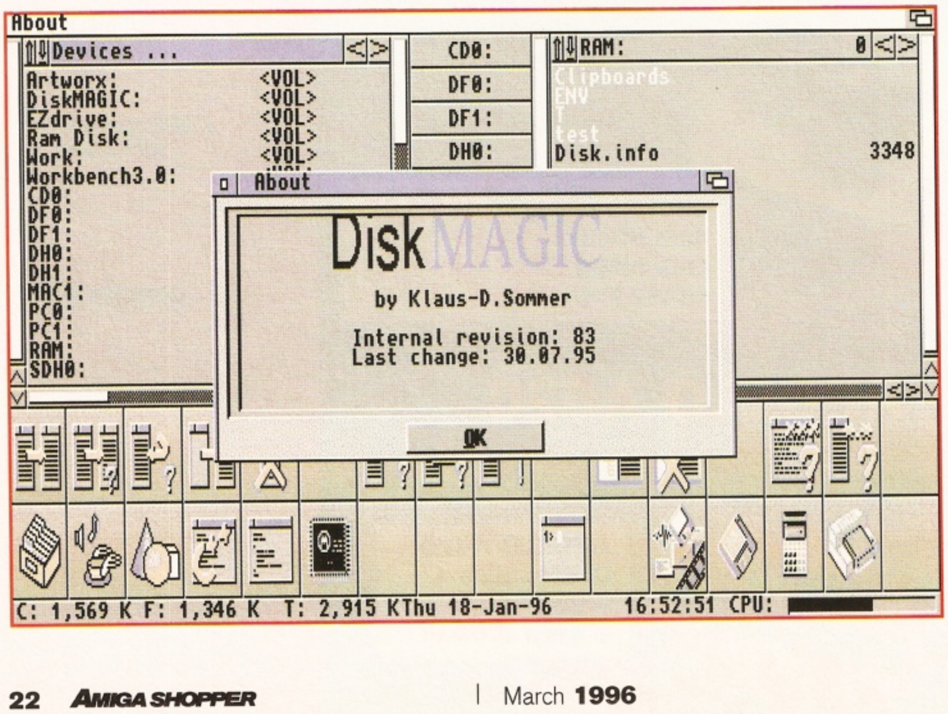
Police action

ELSPA and the West and South Yorkshire police carried out raids just before Christmas '95, in a joint venture called Operation Hard Drive; they recovered over 500 CD-ROM compilations, each one containing up to 400 programs. Their retail value would have been approaching £30,000, yet the CDs were being sold at car boot sales for as little as £25. These raids netted over £5 million worth of pirated CD software. The gang responsible was estimated to have a turnover of £2 million per week.

Piracy is a multi-layered phenomenon. Taken from the bottom end up, there is quite blatant infringement of copyright in the Public Domain in the form of software emulators of old platforms like the Spectrum and Commodore 64. "Snapshots" (which are forms of data that the emulator can read) of old games from years ago are freely available. It seems unlikely, because these games are from redundant platforms and sometimes from companies that no longer exist, that any action will ever be taken because no income is being lost. This has become an accepted end of what still amounts to piracy. Even clones of old games, where none of the original code is used, are in dubious territory.

This, however, is not the area that worries the authorities and the companies. It is the current and future platforms that are under threat and losing massive profits. Copies of PlayStation and 3DO games not even released

Programs often get pirated from versions that should never have been released.



yet are available. CDs and DAT tapes containing every available release for the Amiga have been discovered. Compilations of PC software containing every business and leisure title of note have also been found.

It's often believed that the majority of pirated software is games, but Geoffrey Webster says otherwise: "The majority of piracy takes place with business software, with £400 million of the total falling into this category. The size of the problem in the home market is unclear, but a survey carried out by us last year showed that home computer users had up to 74 per cent of their software unlicensed."

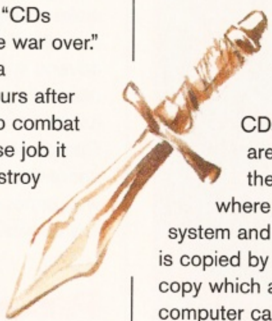


Global pirates

Such is the level of the problem that last year it was at the root of an argument between the USA and China, where many companies exist purely to pirate goods. America was concerned with the level of illegal copying of all US products, from T-shirts and audio CDs to films and computer software. China argued that the problem was no worse than in Western countries until recently and that it was unrealistic to expect them to stamp out the problem, something which no other country had managed. The US threatened sanctions in the form of 100 per cent punitive tariffs on more than $1 billion worth of Chinese exports; China retaliated with threats of equal counter measures.

Some sources claim that the underlying argument was not about software piracy, but the next generation of copyright infringement that is looming – the copying of hardware. One source was reported as saying quite simply, "CDs would not be worth provoking a trade war over."

The negotiations continued and a cliffhanger agreement was signed hours after the original deadline. China agreed to combat piracy by setting up task forces whose job it would be to search premises and destroy pirated goods and manufacturing equipment used. In particular, the USA wanted 29 known factories to be targeted.



These were attempts to close down the business end of piracy where the goods are cloned as nearly as possible by operators, including packaging, so that they can be sold on as originals to unsuspecting customers at low prices. It did nothing to address the problem that ELSPA and the police have been facing of pirates compiling CDs with cracked software.

Believe it or not, the UK has quite a good record as far as piracy goes. A recent estimate set the percentage of legal software in the market at 46 per cent in the UK, which although less than half was far better than the 14 per cent achieved by other countries like Italy and Spain.

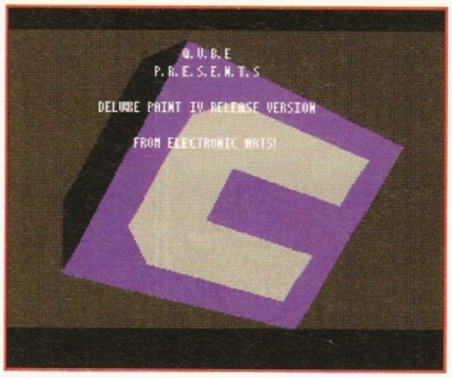
Despite every country improving its record over time, the estimated value of pirated software still runs into billions of pounds.

Aside from the compilation of CDs by the "professional" pirates, there are two real areas of piracy. The first is the so-called playground piracy. This is where software that has no protection system and relies on respect for the copyright is copied by people. This is a simple disk-to-disk copy which anyone with basic knowledge of a computer can do. It might be children at school swapping games or employees at work copying software from the company.

Copying at work

Until recently the level of illegal copying of software in the workplace was not regarded as a serious problem by employers. In fact, in a study a few years ago it was considered less serious than hacking the company's computer system and only slightly more serious than

Popular programs are released by cracking crews who add an intro to make sure their name is spread around as being "elite".

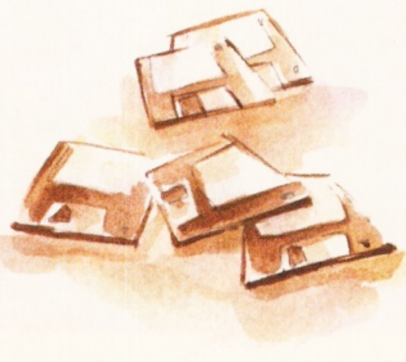


> "The majority of piracy takes place with **business** software."





CD-ROM drives were thought to be a solution because they were read only (above), but the price of recordable drives (right) has dropped and now CDs are the biggest danger.



speeding or illegal parking. It certainly was not in the same league as personal theft.

Licence to copy?

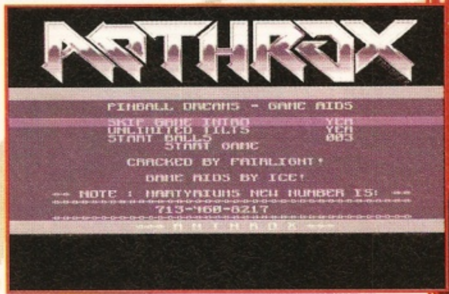
The problem is compounded because some software packages have licences that allow the program to be copied for use on a home computer, on the assumption that both copies will not be in use at the same time. This has happened possibly because of the growth of portable computers where the package can obviously be used wherever the computer is; which is only one step away from the package been used on two machines by the same person but at different times of day.

However, companies have woken up to the fact that separate licences are required for each copy of the software used within the office. This has been caused partially by legal proceedings against companies discovered using pirated software. A division of GEC was last year forced to pay out undisclosed damages after admitting software piracy. They admitted to using 177 unauthorised copies and ended up buying not only the additional licences required but also paying what is suspected to be considerable damages. Companies are beginning to decide the risk might not be worth the massive cost if caught.

The two laws used to stop pirates are the Copyright, Designs and Patent Act 1988 and the Trademarks Act 1994, which allow for prosecution leading to up to 10 years in prison and unlimited fines. It's unlikely that companies would end up having executives facing prison, but the threat of fines is very real.

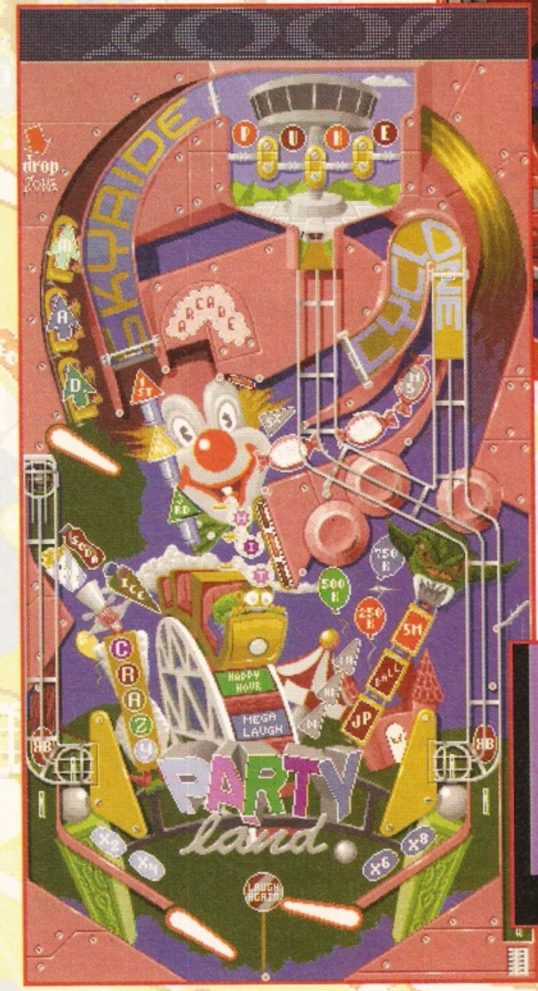
The other driving force behind companies cleaning up their hard drives has been the threat of viruses. Virus programmers often use illegal copies of programs as trojan horses in which they can hide their virus code. Companies may not like shelling out for proper software, but they like the thought of losing valuable data to viruses even less.

The threat of prison and fines doesn't seem to deter the second set of pirates. These are actual coders grouped together as cracking crews who make it their aim to get hold of new software releases as fast as possible and remove any copy protection they find so that the software can be easily duplicated.



Some cracked games include "trainer" modes which give infinite lives or power-ups.







Games are a particular challenge to pirates because they have custom disksystems.

Copying made easy

On the Amiga, playground pirates found that some software had been written that used different disk systems from AmigaDOS. These disks were non-DOS and couldn't be copied with a simple disk copier. Bits of hardware appeared on the market that attempted to sync up internal and external drives so that they could copy these unusual formats. This allowed people with no computer knowledge to continue copying software for their friends.

The hardware was legal and could, and indeed still can, be bought from computer stores. Its theoretical use was for people to make a single backup for their own personal use, should they damage their original disks. The adverts in magazines often stated that the manufacturers did not condone the use of their hardware to duplicate copyright software. Companies that used custom disk formats were unconvinced and often claimed that backing up was unnecessary because they would replace any original disks that were damaged.

Password system

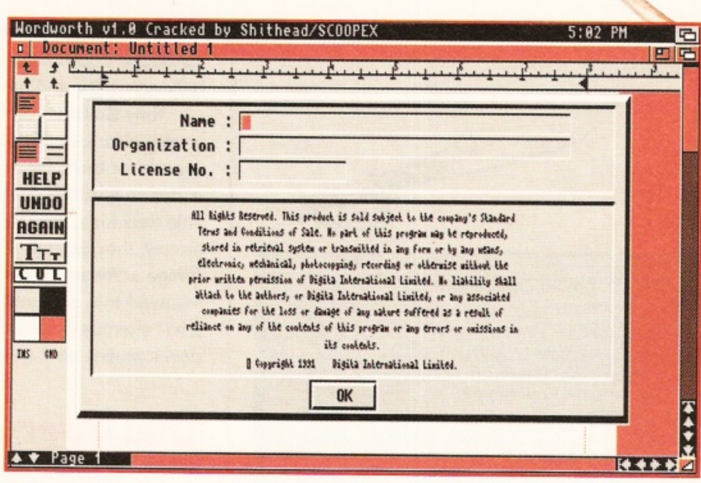
Companies then introduced another idea – that of the code sheet. The idea is a simple password system, where the program insists on a word or figure, taken from either a dedicated sheet or from the manual, being inputted. The program asks for a different code every time the program is loaded and checks the entry against its database of correct answers.

In games software the password system might be called several times during play to make it more difficult for the system to be circumvented. Playground pirates got around this by simply photocopying the manuals and code sheets. Companies then produced the code sheets in such a way as to prevent photocopying, often using a glossy colour over a similar matt shade. This meant that you could read original copies, but that copies could not pick up the subtle difference in colour.

The idea was to lead to a stalemate, where playground pirates were stopped. In fact this is where the cracking crews enter the arena. While companies still use both systems of protection and have developed disk systems that even the



Digita forecast that for every single copy of their excellent Wordworth program, there are a further eight or nine pirate copies.



The protection system might be broken, but illegal copies lack useful things like manuals and customer support. Is it worth it?

hardware copiers can't deal with, cracking crews have circumvented the entire question by removing the password system from software and copying the programs on to standard DOS disks. Playground pirates are back in business.

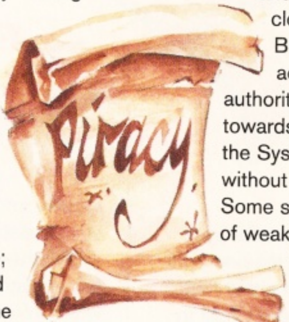
The question that arises from all this is what exactly do the pirates hope to gain from spending their time cracking the protection? These are not the people distributing large quantities of the software and actually making the money from other people's products and work.

It's a cracker...

One member of the Amiga "scene" explains: "Cracking software is simply another way for a group or an individual to get their name known. There is demand for pirated software; so if a group can fill that demand and be recognised for it, they'll spend time disabling protection and putting the game on to easily copyable standard DOS disks, with the addition of a small intro.

"Cracking is also a challenge. Some people enjoy coding; some people enjoy writing music and some people enjoy cracking games."

It is the addition of an intro, a small piece of code that tags the pirated software with the group's signature, which proves that they were responsible. The intros vary from a simple text screen to those including short animations. The idea is that the quicker a product is cracked and released with an impressive intro, the more street cred (although modem cred is more accurate). Once cracked the software is made available through "warez" BBSs, which are bulletin boards that contain pirated software.



The BBSs, which used to be quite blatant and readily accessible, have become closed systems. These are private BBSs that stop just anyone from accessing them, especially the authorities. There has also been a move towards legal scene BBSs, which allows the SysOp to have a wide range of users without the worry of being arrested. Some sceners have taken this as a sign of weakness and equate "legal to sad".

Thankfully, those narrow views seem to be taken by the younger members, while the adults take a more astute view.

While the idea of competition between groups is certainly true – charts showing groups' successes exist – some pirates give a more tangible reason. They claim that the price of software is far too high, particularly in the games market where £30 can often be wasted on an appalling game.

But I wrote it!

The extent to which copyright law applies to software was clarified by the courts back in 1993. The courts ruled that software using original code, but which still arrived at the same end, so called non-literal copying of "look and feel", could be considered as copyright infringement. In other words, two products with totally separate code but performing identical functions with similar interfaces. The UK case, John Richardson Computers Ltd vs Flanders and Chemtec Ltd, surrounded software designed specifically for use in the pharmaceutical industry. One company developed a different version of the program and was sued in a case that the courts partially upheld. The decision was reached using very strict boundaries which has meant that there haven't been floods of cases claiming that "they copied my word processor".

Passing the buck

Companies don't tend to wear this view very well. Daniel Pettitt from Digita says: "The popular response from someone breaking the law is transferring the blame to another party. What pirates do not realise is the cost of producing a piece of software. There is also no real guarantee that you will actually sell enough to return your costs.

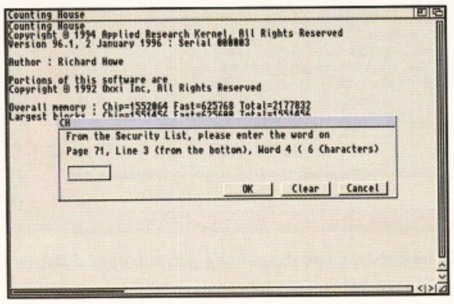
"For example, a new product like Organiser took eight months and many thousands of pounds to develop. Once finished, you have to advertise in the popular magazines so that users are aware of it and can place an order.

"It is not a cheap business!

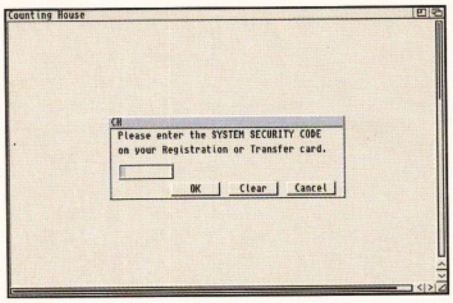
"It is very difficult to estimate how much business you lose through piracy because there is no way of quantifying it. It also depends a great deal on the product's popularity, price and the platform it is running on.

"Cracking software is **simply** another way for a group or an individual to get their name known."





Some companies are so worried that they have put multiple security checks on their programs...



...like the brand new Counting House, but it's not likely to stop experienced pirates.

"However, we estimate that for every one legitimate copy of Wordworth, there are between eight and ten pirated copies."

Tony Bullock from Softwood says the matter is very clear cut: "Piracy is theft and there is no excuse for theft. Every time someone copies a software title, the developers lose a sale. Every sale they lose, they lose money. If they lose money, they go out of business. Some other Amiga software developers have already followed this path and if piracy escalates further it will eventually lead to no software development on the Amiga."

Trial offer

Pirates often argue that they give people the chance to try out the product before deciding to buy it. As one pirate put it; "It's like an extended demo or Shareware and we do encourage people to buy the original if they like it. Some do, because people like owning the whole boxed thing, but others don't, although it's unlikely that they would have ever forked out for the original anyway."

Michael Console Battilana from Cloanto agrees in part. "Pirated copies used by people who cannot afford to buy the original package should not be counted as 'lost business'. Several statistics are apparently affected by this mistake. Unfortunately, however, piracy is also available to those who can afford an original package and this of course hurts both the industry and honest users."



The solution, claim pirates is to offer even better value for money. "Reducing the price will stimulate sales – there is no doubt about that. The old line 'we have to keep the price high to compensate for piracy' that the software houses keep coming out with is so naive. Some pirates do buy software. They buy Alien Breed 3D, they buy Breathless, they buy Sensible Soccer, because they're quality software and they don't mind forking out £25 for that. Now if these games were £15, you would get more pirates getting a game from a BBS and then buying the original. Many of today's cracked games come with a message from the crackers asking the user to buy the original if they like the software."

Cloanto concur with the view that quality sells. "Although we do have to take legal actions from time to time, I think that a good product at a good price with good distribution is the most practical way to fight piracy."

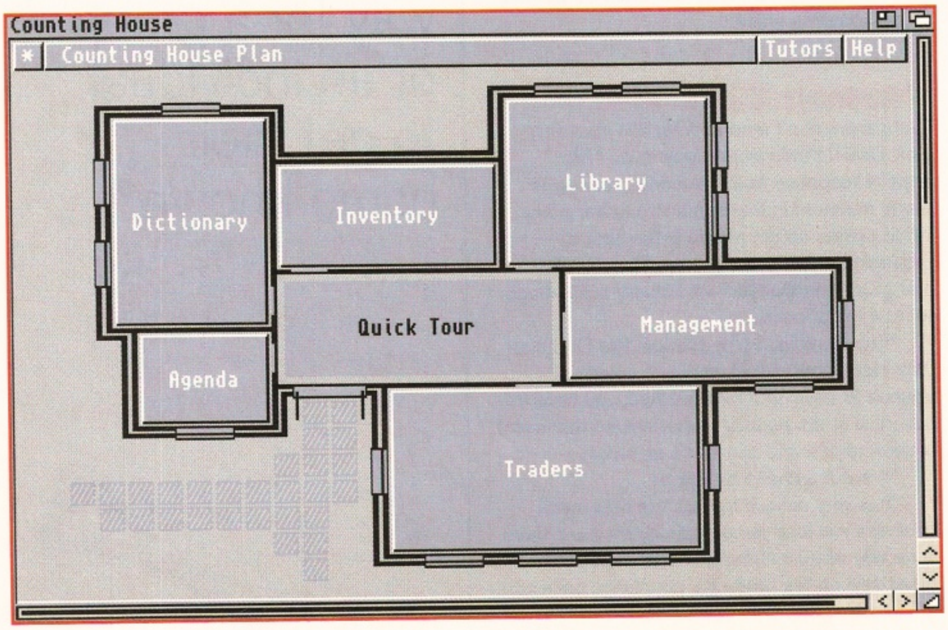
However, companies also point out that legitimate demos of programs exist on Aminet and magazine Coverdisks. As Michael of Cloanto put it: "On the one hand, I agree that pirated software provides a means of introducing software to potential users. But from that perspective, the publication and distribution of demo versions should have almost the same effect. We do have demo versions of all our packages, yet the pirate BBSs carry the latest commercial versions, sometimes even tampering with the serial number just to make their version look newer – e.g. PPaint 6.2, which was never released by us!" With full programs also often given away by magazines, companies ask how anyone can justify not paying £4 for a legitimate copy.

Free software?

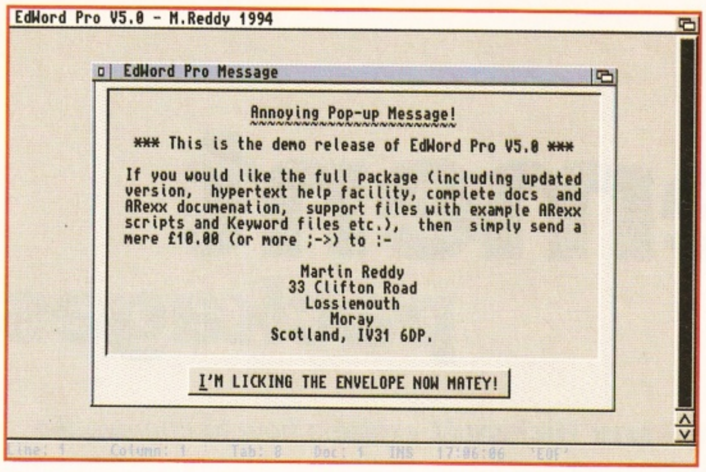
"What if a company like Softwood released a full working version of a new software title on a magazine Coverdisk and offered free registration? Would the pirates register and buy the manual? On the front cover of your sister magazine, Amiga Format [March 1996] there is a Final Writer Lite Coverdisk; a full working version of our new word processor which you can register to receive product information and news free." Tony Bullock doesn't believe that the cost of the software is an excuse for pirates to legitimise their activities. "Saying that reducing the price of software will reduce piracy is like saying that thieves won't rob jewellers if they dropped their prices!"

Perhaps there is not as much discrepancy between the two arguments as it seems. Some pirates claim that the "warez" are simply a commodity and that they rarely even look at the software they are plying. The aim is purely to become the most respected (from members of the scene) BBS with the most uploads and downloads. The competition is the all, not the products themselves. Many of the products might never be used by the pirates, so the question of lost sales might not be relevant to those people.

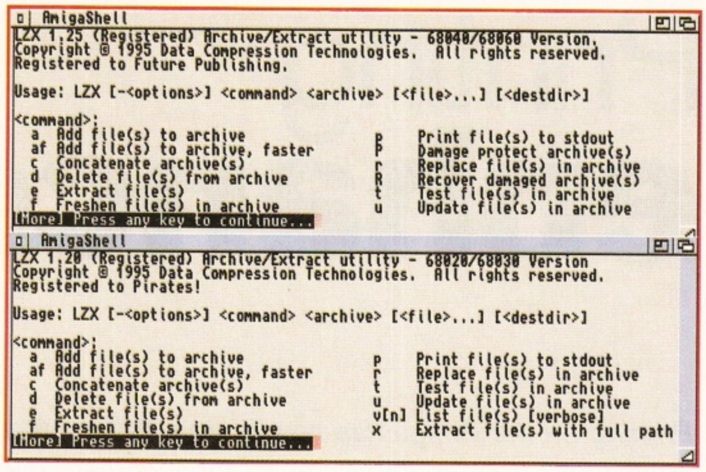
However, that doesn't apply to playground pirates or the traders who do little more than copy disks. Without getting hold of the cracked products, these people would be left with no option but to pay for the proper software. The difficulty in cracking software "depends on the protection system being used. Simple systems like the manual/novella protection ("Enter word x on page y") are dead easy; just find the bit of code that checks the user's input against the correct answer and hack it out. Trackloading games, where the game is stored on a non-



Only when you've passed both checks can you access Counting House itself.



Even Shareware programs are open to abuse. Not registering is often a breach of copyright, but oddly many pirates will register Shareware.



But not all, some people even crack Shareware programs, which is likely to deter programmers from creating new programs.

DOS disk are a bit more tricky, but no problem to an experienced cracker. Cracking isn't for the novice though; it takes a good knowledge of 680x0 code and the internal workings of the Amiga to crack a game," explains one scener.

Boosting sales

However, they argue that it is precisely this action, the one that enables novices to pirate software that leads to the popularity of a platform. "There is no doubt in my mind that piracy encourages the sales of a machine. For example, if three of your mates have Amigas and they all get the software for free, wouldn't you want an Amiga and free software too? Result – another Amiga sold." If this were true, it would mean an increased market out of which the same percentage would buy original products, but resulting in a larger number of sales.

This argument is partially accepted by some companies, as Cloanto explain. "The most immediate way to protect commercial software from piracy would be, in our opinion, the implementation of a unique serial number in each computer. Mainframes have had serial numbers for decades and software packages were personalised to run only on one computer.

"According to statistics, the modest cost of a hardware serial number could have prevented the loss of hundreds of pounds worth of software for each computer and maybe the price of today's software would be less as a result. But, maybe, computer manufacturers had other priorities, last but not least that there should be a "lot of software" for user on their systems?"



This full game got mistakenly passed through PD houses and briefly made it on to Aminet.

Software companies know that piracy is not going to disappear. A number of busts have meant that some sceners are leaving piracy behind and turning legal, but the problem will never disappear. While there is still a demand, despite the risks, there will always be people ready to take their place. However, the threat of legal action is not a solution in itself because most pirates consider it almost inconsequential. "For Joe Bloggs, who downloads stuff from BBSs and trades disks by post, there's not a chance in hell that he's going to be prosecuted unless he's mailing out thousands of disks a day. Partly this is down to the enforcement agencies – FAST are understaffed and the local police forces don't really care. Hell, I know a couple of policemen who pirate stuff regularly," claimed one scener.



Company initiatives

Companies have therefore developed their own plans. While they continue to pass on any information to the authorities when they can, they believe that there is more that they can do themselves. Some piracy arises from ignorance of the law, such as selling a hard drive which still has software on it. Education, think Digita, is the key and they attempt to inform users through "prominent sections in instruction books." They also think that providing more than just the software is the key. "Providing value for money with instruction books and quality technical support to registered users only. For example, we have commissioned author Larry Hickmott to write the Wordworth 5 manual so that users can get the most out of Wordworth. Also, we offer extra services to registered users such as free newsletters and special discounts."



Softwood too have followed this line. "We offer free technical support, reductions on other Softwood products and even extras like free fonts with certain products. We continue to develop our software adding to its functionality and ease of use and then make the upgrades available to registered users for a minimal charge. Only registered users can upgrade this way which leaves the pirate with an outdated piece of software."

Fair cop

If you want to report an instance of software piracy, you can contact FAST on ☎ 01753 527999 or ELSPA on ☎ 01386 833810.

Many thanks

Thanks to everyone who answered my questions and for the frankness they showed; to the companies and to FAST for sparing some of their valuable time and to the sceners who got in contact. No handles or names have been used to protect anonymity and all correspondence and material supplied has been destroyed. Thanks to the sceners from Digital Candy BBS ☎ 0191 232 5527, which has shown how successful a 100 per cent legal scene BBS can be. Should anyone wish to comment on the points raised in this article, we would welcome a mature debate within our Talking Shop section. Send correspondence to the usual snail mail and E-mail addresses.

The end result

Attitudes do seem to be changing. The figure of pirated goods is dropping and some pirates are giving up the game and encouraging others to do so. FAST are bringing pressure to bear with 250 actions each year leading to 60-70 search warrants and a similar number of court cases. Prison might not be a deterrent but the thought of losing all their hardware may be making some pirates think twice.

Serious pirates, the ones who make thousands of pounds a day from selling illegal software are not likely to stop, because they can, literally, afford the risk. But maybe the lower end users will think twice before buying more pirated software and realise what legitimate software offers them. And equally, companies may think about what more they can offer Amiga users to stop them from wanting pirated software. Only by destroying the demand for piracy can they stop the supply. ■



Printing enhancement packages

Printing on the Amiga has never been its best feature. **Larry Hickmott** *explains how to improve the quality and reviews three printer enhancement packages.*

If I were to pick one area on the Amiga where it seriously falls over, it would be printing. If I had a pint for every person who's asked me how they can stop their colour printer pushing out prints that look more like last night's curry, I'd have enough beer to satisfy my local rugby league team. The Amiga and printing just do not go together. Not as standard anyway.

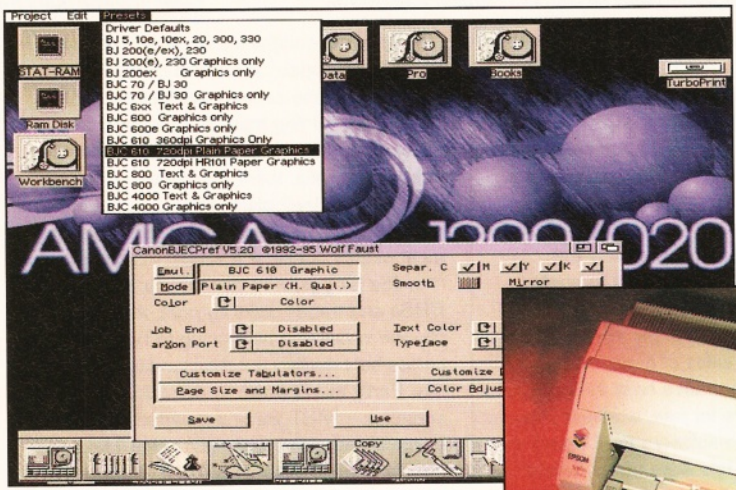
The only way you get something decent out of your Amiga that approaches anything like the quality other platforms enjoy, is by adding a printing enhancement package. Here's why.

Caught in a time warp

I've been an Amiga owner since the late eighties when the name Amiga was guaranteed to impress less well-off folk with their colourless PCs. Since then, I can't remember any major changes to the printing side of things. The look of Preferences has changed, as have the printer drivers, but like then, the basic printing functions of the Amiga today leave a lot to be desired.

The main problem is graphics printing to printers like inkjets and pin printers. Printing text files and PostScript is looked after well enough by a number of excellent third-party packages, but you try and get that photograph on your screen to print and look anything like the original, without a printing enhancement package, and you'll be sadly disappointed.

Let's face it, graphics output is the type of printing most of us use. If you use Final Writer, and not PostScript, then your output is graphics based. If you use Wordworth or ProPage, your output is more than likely graphics based. This is how the process works in simple terms.



The main preferences panel for the Canon 610 is linked to many other panels, giving you a lot of control over many aspects of your printing process.

First, your application looks at the printer driver and your Printer preferences settings and creates a high resolution copy in memory of your page on-screen. This is done usually a strip at a time with the size of the strip dependent on how much memory your Amiga has. This is then sent to the printer device which forwards the output to the parallel port (in the majority of cases), and then down the cable to the printer. Let's break this down and look at the individual components to see the failings of a standard Amiga.

The first of these components is the printer driver. Think of it as a filter which translates one set of commands from your Amiga application into commands understood by your printer. Now, not all printers are the same. Manufacturers constantly update their models with new internal commands and features. This is why I get so annoyed that neither printer manufacturers nor the people making Amigas provide up-to-date printer drivers to attach these great printers to our Amigas: the printer drivers on new Amiga Technologies' machines are very old indeed.



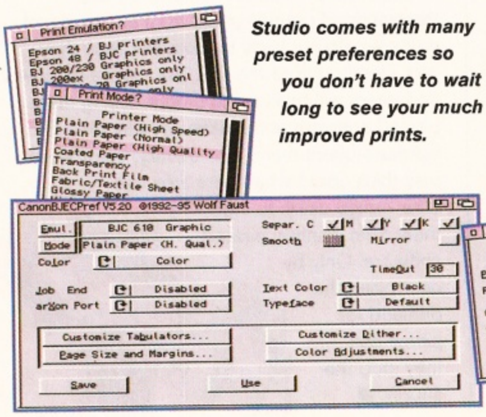
EnPrint was the first enhancement program to support the Epson Colour Stylus properly.

Where there's hope...

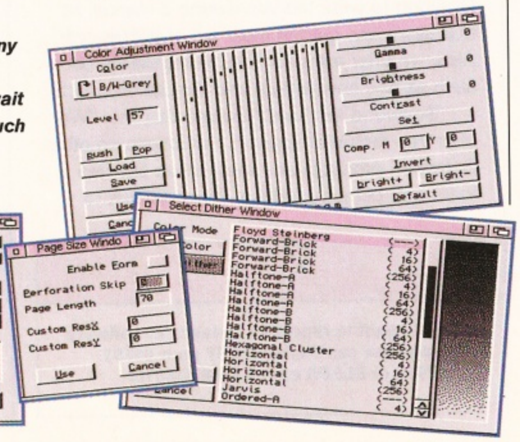
I can understand the attitude of the printer manufacturers, who look upon the Amiga as a games machine and one where there is little profit to be made. However, I never understood why Commodore didn't get one of the many talented printer experts to write these drivers for the benefit of all Amiga owners. Rumour has it that Amiga Technologies are doing something towards improving the printing situation.

The printer driver isn't the be all and end all though. Far from it. For those who think they can pick up a PD driver from an Aminet CD and everything will be well again, think again.

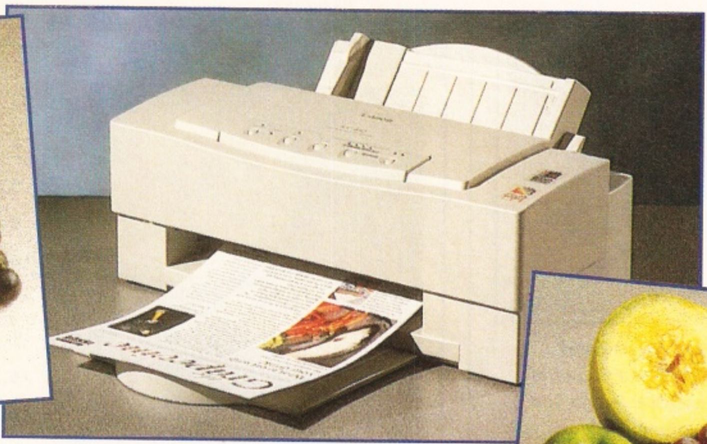
As well as the printer driver, there are printer preferences. Two of the most important of these are Print Preferences and PrinterGFX



Studio comes with many preset preferences so you don't have to wait long to see your much improved prints.









Left: The new Canon 610 which we will review next month. Far left: An image printed on the Canon 610 using TurboPrint. Below: The same picture printed on the 610 using Studio 2.

preferences. These programs sit in your Prefs drawer and allow you to control the size of the page, the type of dither used, etc. However, the control these give you is limited – they don't recognise what sort of printer you have and adjust the type of settings you have to change.

The settings that need to be adjusted for a black and white 300dpi printer are different to those for a 720dpi colour printer. At present, the best PrinterGFX can do is give you three dithers to choose from. Which, I might add, are not good enough for producing photographic quality from printers capable of such.

The last component I should mention is the Amiga's printer device; a piece of software that sits in your Devs drawer. It is so limited in the number of colours it can handle that TurboPrint, has bypassed it all together. What we really need is a 24-bit printer.device.

A brighter picture

Having painted a gloomy picture of the way the Amiga prints, let's look at three printing enhancement packages that will make a difference to the quality of your printing.

The two main protagonists are German products, Studio 2 Professional (Wolf Faust) and TurboPrint 4.1 (IrseeSoft). The third is a specialised product for Epson Stylus users. It's called EnPrint from Endicor in the United States.

All these enhancement packages share a common base. Each one comprises a set of preferences program(s) to either supplement or replace your current printer preferences. They also come with dedicated printer drivers for the latest printers; and lastly, all the packages have a picture printing application program for printing pictures only. As you can see, these are much more than just printer drivers.

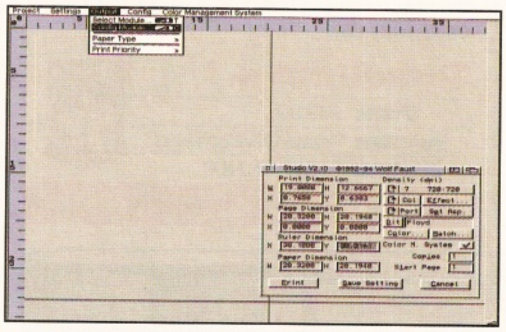
Studio 2.10 Professional

One of the most well known products on the Amiga. Its author, Wolf Faust, has come a long way since developing his first driver for an Epson printer. When it comes to printer technology and the Amiga, there are few people who know it as well as Wolf. Canon turn to him for Amiga printer drivers, which is why you get CanonDisk free from them when you buy a Canon printer – worth remembering when deciding what you can afford.

Studio 2 is a further development on CanonDisk. Whereas one supports only Canon printers, Studio 2 supports many hundreds. The package consists of the following; first and foremost, there are printer drivers for hundreds of printers. I was able to use Studio to drive the Stylus Colour II, the DeskJet 850C and the Canon 610, three of the latest printers on the market.

As well as all this, there are a number of different preferences programs for different types of printers. For the 850C, the preference program is DeskPref4C (four-colour) and for the Epson, it's EpsonP2Pref. When you witness the control these preferences programs give you over your printer, you start to see just how pitiful the basic Amiga preferences are and why a printer driver on its own is just not enough.

The last major part of the package is the Studio Picture printing application program. This is a dedicated program for printing pictures and should be used in preference to any other program when you want to print a picture or two. The quality of pictures printed from the Studio Application program far exceeds that from pictures printed in DPaint.



All the programs in this feature come with a picture printing application program. This is the one that comes with Studio 2.

Studio 2 has a separate preference program for the Hewlett-Packard DeskJet 850C called DeskPref 4C.



But what's it like?

Having used it for many years, it seems easy for me but I know from the comments I get that many find it very demanding on the grey matter. Therefore, I deliberately avoided the powerful editing functions where you can control colour balance and so on and just went with the default settings. In this version, 2.10, I have to say the defaults, which can found in the Presets menu of the preferences program, worked very well with all three printers I tested. The only doubtful output came when using the Colour Stylus, where colour images from applications like ProPage and Final Writer came out a bit dark. Greyscale was fine.

The output in all cases when directed through Studio preferences, was also a little slow. Not as bad as EnPrint, but slower than TurboPrint which doesn't use the printer device. Bear in mind that Studio is probably working as fast as it can within system constraints.

Overall, version 2.10 of Studio is much improved over previous versions. Picture quality of images output from the Picture Printing Application was excellent. In one test, using the Canon 610, with the same paper and same image, the quality from Studio 2.10 was the same as the image produced by TurboPrint.

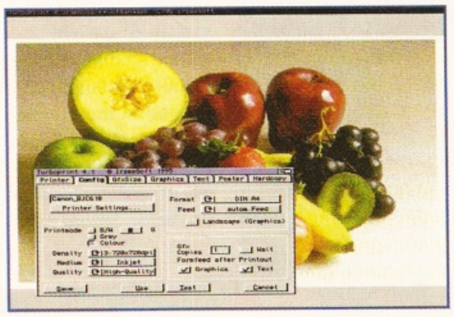
Studio 2.10 Prof

Price: £49.95
Supplier: HiSoft
Contact: 01525 718181
Verdict: 91% Star buy

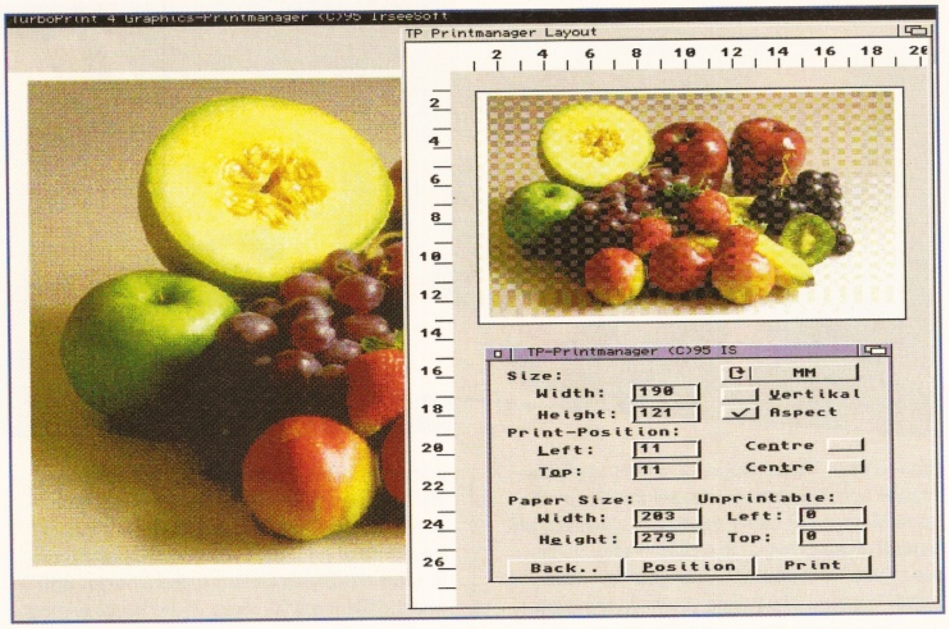
TurboPrint 4.1

This package is the new kid on the block in the UK. Although TurboPrint has been around for years, recent versions have not been available in

30



TurboPrint 4.1 has a very easy to use and powerful preferences program that supports many popular printers. If only the Amiga had this level of support as standard.



The Print Manager program that comes with TurboPrint 4.1 not only looks the business, but the output was excellent as well.

English. This has now changed and version 4.1 is available with an English manual.

Although it shares some similarities with Studio (it has a preferences program and a separate picture printing application called Print Manager), it works in a very different manner to the other two packages. Whereas Studio and EnPrint work in the normal Amiga way with output going through Printer preferences and through the printer.device, TurboPrint patches the system and intercepts calls going to the printer.device taking care of them itself.

This takes a little getting used to because you don't need to select a printer driver for it in Amiga Print preferences. Just run TurboPrefs and it sits in the background waiting for output to come its way. The theory is that by going around the printer.device TurboPrint will be able to produce better output that it would normally by going through the Amiga printer.device. In some cases, this is true. The test prints on the DeskJet 850C were better than those produced by Studio. And yet, when I tested both Studio and TurboPrint on the Canon 610, you'd have trouble telling the test prints apart; from both your normal applications and the picture printing programs.

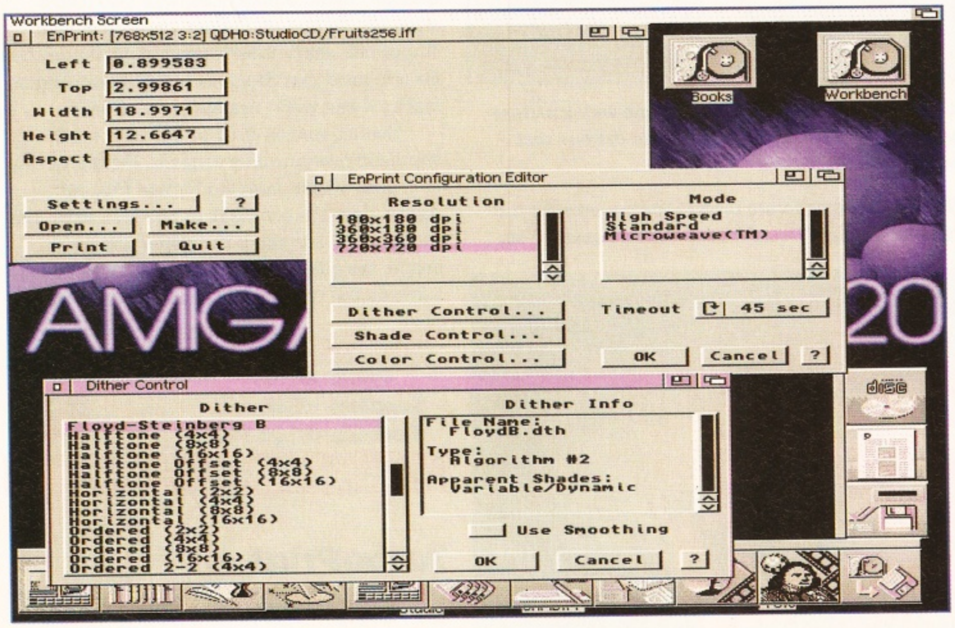
One area where TurboPrint 4.1 did gain is in speed. Print times were down by as much as 10 per cent in some cases; when you consider that some prints were taking as long as two hours or more at 720dpi, percentages like that can make a difference. As this was my first time with TurboPrint, I have to say I was impressed with how easy it was to get to grips with and the quality of the prints using the default settings.

I don't think it's as complete a package as Studio 2, but it certainly gives it a run for its money. Bear in mind that I don't know TurboPrint as well as Studio, but I certainly look forward to testing TurboPrint extensively over the coming months to see just how well it works when used every day.

TurboPrint 4.1

Price: £49.99
Supplier: Wizard Developments
Contact: 01322 272908
Verdict: 90% Star buy

AMIGA SHOPPER



The functions for the Epson Colour Stylus are well supported by EnPrint.

EnPrint 2.0

When the Epson Colour Stylus first appeared, driving it from an Amiga proved to be a problem. Studio supported it, but early versions used to over-ink the page quite badly and we didn't have TurboPrint here in the UK. Along came EnPrint from Endicor from UK company, Eyetech. Early versions would drive it but sadly lacked many of the features necessary for photographic output.

A few months later and we have version 2 of EnPrint and, although rough around the edges, it works well. Like Studio and TurboPrint, EnPrint is made up of two programs. One to set the preferences for the Stylus and another to print pictures. The control you have over dithers, colour adjustment and so on is as good as most will need. Not that I had to play with the settings because the default settings provided in the leaflet that came with the disk worked fine.

I couldn't fault the printed quality because EnPrint matched the other two products very well. It was a lot slower, however, because it spools the information to disk first and then prints it. Using the EnPrint picture printing application, I was surprised when I went to open a 13Mb file because the program went away and started making another copy of it on disk for its own use. This meant that it took 15 minutes just to open the file. Thankfully, this spool-to-disk function can be turned off, but you do need to re-install EnPrint to do it.

EnPrint is rough around the edges, but it works and its simplicity is welcome. Bear in mind that it doesn't as yet support printers other than the Stylus range and the documentation was no more than a couple of A4 sheets. This, I am told, will have changed by the time you read this. EnPrint works – you can't ask for more! ■

EnPrint 2.0

Price: £34.95
Supplier: Eyetech Group Ltd
Contact: 01642 713185
Verdict: 87%

11 GOOD REASONS FOR OWNING SPIRIT LITE

GRAHAM BLYTH'S HANDS-ON GUIDE

Spirit stunned musicians and engineers with the launch of Folio, the world's most versatile and affordable high quality personal mixer. Now there's Folio Lite, making the concept of low-cost quality mixing even more affordable.

But low cost doesn't mean we've skimped on the little details that can make the difference when you're working on tracks, playing at a gig or mixing to video.

That's because Folio Lite has been designed by Graham Blyth, a perfectionist who believes that even the smallest flaws can seriously compromise your mix.

So here are 11 things that Graham slaved over to meet the challenge of designing Lite. There's no hype, just the real reasons why Lite stands out against the competition – taken straight from Graham's notebook.

HOW AND WHERE YOU COULD USE FOLIO LITE

- Home Studio mixer
- Submixing in a Studio
- Live Submixing of Drums or Keyboards
- Location mixing direct to DAT
- Audio Visual mixer
- Multi-Media mixer
- Tape Monitor mixer





LIVE

STUDIO

SUBMIXER

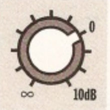
1 Quiet Inputs, with Huge Signal Handling Capacity

At -129dBu EIN, Lite's mic preamps are actually quieter than many large "pro" consoles. Our new mic preamps give you even more signal handling than before; now you get sensitivity ranging from -4 to -60dB, rather than the usual -10 to -50dB; that's **five times more** handling capacity than other consoles. This means that you can connect almost anything from low output ribbon mics to active DI boxes with headroom to spare.

2 PFL Solo System

Among small mixers, only Lite lets you monitor individual input channels. You can even monitor the stereo inputs in stereo so that you don't have to rely on a potentially misleading mono sum solo.

3 Fader Zero dB where it should be



On Spirit consoles, the "0dB" point is further round the fader's travel than the standard half-way mark. That way you get more fader resolution where you really need it for smooth, precise control instead of the annoying leaps in level that happen with even small movements. That's because other faders just don't have enough resolution in the right place.

4 Consistent Rotary Controls

Off-the-shelf controls are seldom good enough for the consistent response you need when fine-tuning a mix. Spirit consoles have custom-designed potentiometer laws that guarantee predictable response to any movement.

5 Balanced Inputs and Ground-Compensated Outputs

The combination of both of these godsends on one console is exclusive to Spirit at this price. They protect most input and output signals from interference and noise, even when ground loops, hum fields and lighting rigs try to corrupt your signals.

6 Mono Channel & Mix Inserts

You can connect signal processors like compressors and graphic equalisers to give you more creative control over your mix.

7 British EQ

For an authentic "British" sound, we've given you carefully selected, musically useful points at 80Hz for kick drum thud and 12kHz for top end sizzle or to cut through the mix instead of the typical 100Hz and 10kHz. Compare the sound with others and you will accept nothing less.

8 Dedicated Tape Return

This saves you 2 valuable inputs when playing pre-show music, and is essential for DAT mastering. By routing to mix you have a staggering total of 16 inputs at mixdown.

9 Aux 1 Pre/Post switching

You'd expect just one monitor and one effects send, but Lite's Aux 1 can be switched Pre for foldback monitors or Post to use an extra effect send at mixdown.

10 Long Travel Switches

You can see instantly whether any switch is "on" or "off".

11 Very Compact

Lite measures just 300mm wide by 266mm deep, and is only 38mm high.

12 Designed & Built in Britain

Ok, so Graham found 12 reasons for owning a Folio Lite. Accept no substitutes.

WHO IS SPIRIT'S DESIGN GURU?

At Spirit, we're all passionate about our mixers. But no-one is more passionate than the innovator behind every Spirit console, co-founder of Soundcraft Graham Blyth. Graham's been designing the world's best mixers for about 25 years and relentlessly seeks perfection (Graham will never say "I'm completely satisfied". But he might say "Mmm, that's a step in the right direction"). Every new Spirit mixer he designs makes professional audio quality and features more affordable. Audiophiles love him, other mixer designers envy him. Graham cannot abide poor design, whether it be electronic or ergonomic, and he becomes very emotional about some of the things that the competition gets away with. His philosophy is that every customer has the right to expect quality, because elegant solutions don't have to mean extra expense.



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What application will you use your mixer for? ....

What instrument(s) do you play? ....

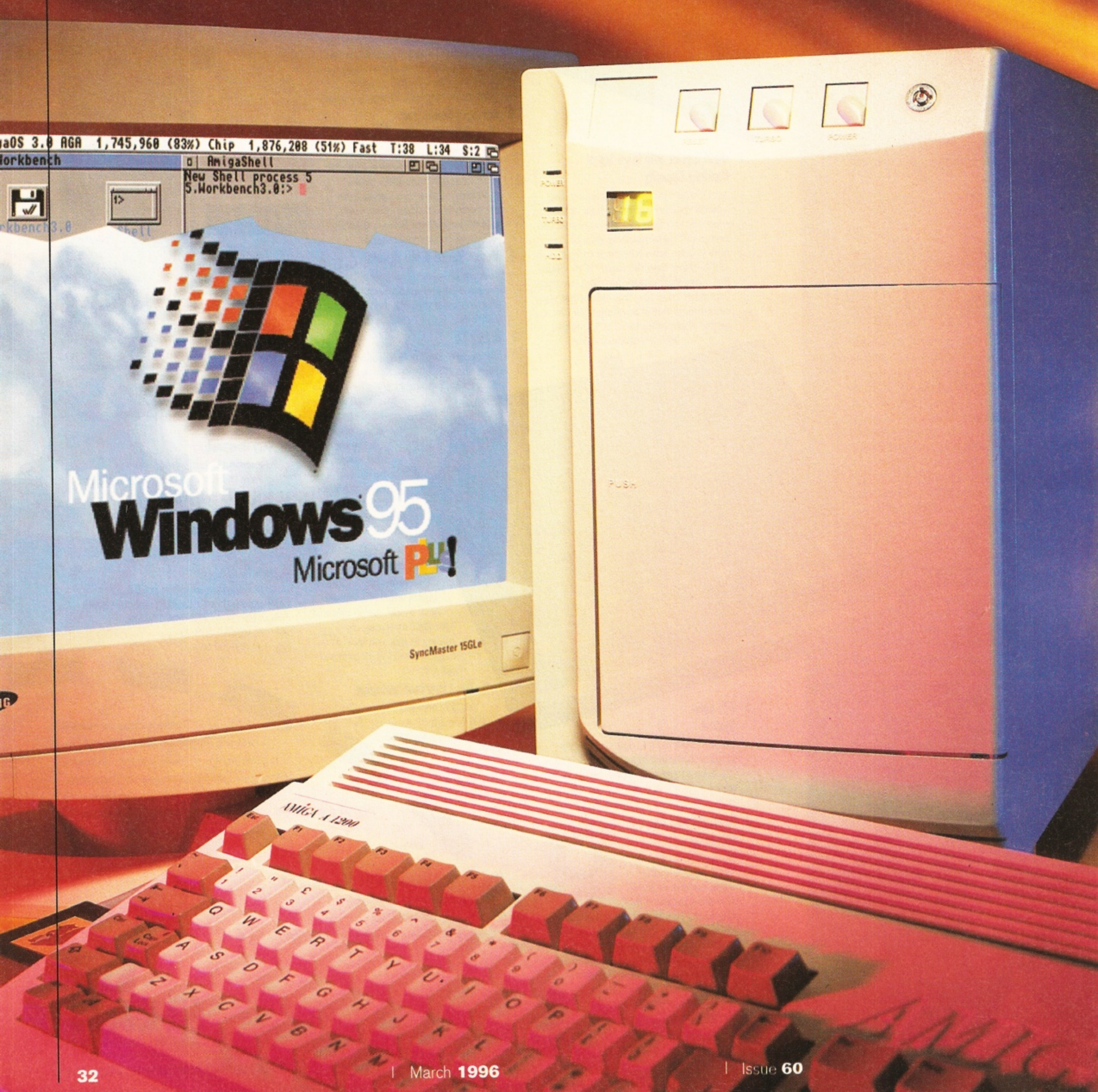
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Amiga and


AmigaShell
New Shell process 5
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AMIGA A1200

PC twinned

David Taylor *gets an exclusive look at the Siamese System from Hi-Q, which finally integrates the Amiga and the PC – two machines that have been traditional enemies.*

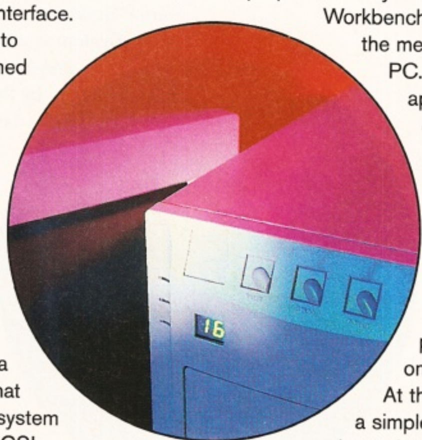
At last the borders between realities are blurring. With Amiga Technologies already working on a next generation Power PC Amiga, the appearance of a system that joins Amiga and PC could not be more timely. Since we first previewed the Siamese System last September, we've had countless calls and letters asking for more information. Well, the initial release is now ready and AS has the details.

The Siamese System is not another PC emulator. There are basically two separate machines operating with custom hardware and software linking the two. The system comes as a PC case, in which you'll find a 486-DX2 IBM compatible PC, although you can opt for a higher-end system if you want. There is also a custom card that handles the monitor switching. You then attach the Amiga to the PC. The system is developed with A1200 users in mind and needs the new Surfin' Squirrel interface, but can be used equally with A4000s using a suitable SCSI interface.

The Amiga's video out goes into the custom card, while the Amiga's audio goes into the PC sound card included in the case. You also have a SCSI connection from the Amiga to the PC case, and a serial connection.

When the system has booted up, you have access to both systems through the Amiga, which does most of the work. The Amiga remains the same as usual, except that you can flick between the Amiga and PC screens with a keyboard combination (Amiga-C on the Amiga or F12 on a PC keyboard if you have one attached). When on the PC, the software (developed by Paul Nolan – creator of the acclaimed Photogenics), polls the mouse and keyboard directly so you control Windows through the Amiga's mouse and keyboard. The software consists of a PC executable, the Amiga commands and a set of custom libraries, as well as a menu system interface.

In order for the system to work, the software is launched on both machines, and because of the PC's Operating System, it's essential that the PC has Windows 95.

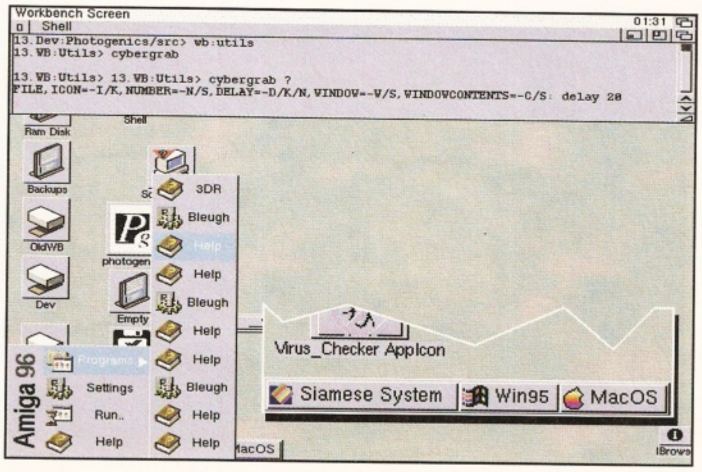


Hi-Q are selling complete bundles with the PC and software all included, but the good news for users who already have both machines is that a Siamese pack is available that will allow you to create the system yourself. All you need is a SCSI interface on the PC with arbitration and Windows95. In brief, the options for upgrading are threefold. Those who have just an Amiga can buy a complete system. Those with an Amiga and a PC can buy a Siamese pack and those with a Hi-Q PowerStation can have it upgraded, with the PC and Siamese System fitted into their case.

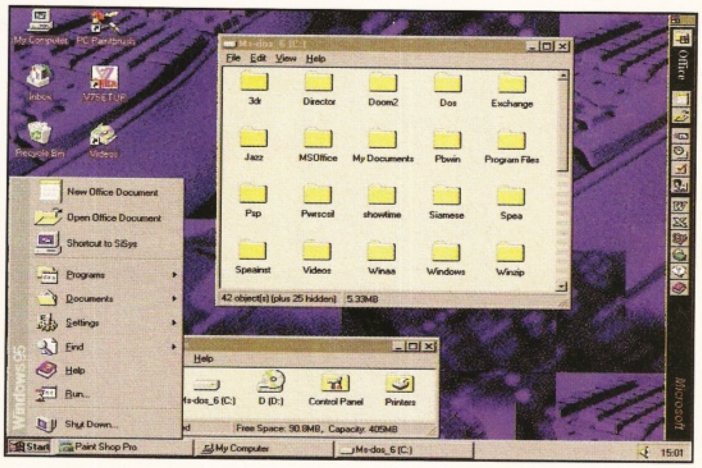
Custom built

Obviously, there's more to it than just coexistence. On the Amiga, a custom utility has been written called Winexe, which is accessed through a neat menu system written for this purpose. The system sits at the bottom of Workbench and allows you to configure the menu for applications on the PC. You can then launch PC applications and be sent directly to the PC. The Workbench interface is constantly being updated, and before public release a preference program is being incorporated that will allow you to point and click to choose which programs can be launched on the PC from Workbench. At the moment it is done through a simple text editor, but that is going to be circumvented.

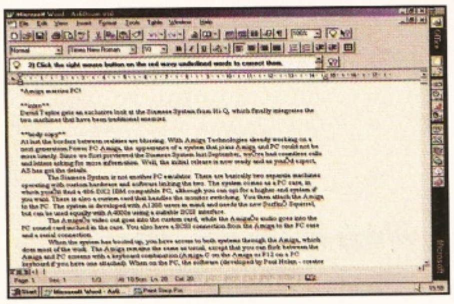
However, you can also use Winexe from other applications. The one that springs to mind is Directory Opus. With its user-configuration, you can set filetypes to recognise certain file formats and use whichever system is



The Amiga's software interface to the PC, allowing you to launch programs on the other platform from here.



The PC has a program that accompanies the Amiga one and interprets the Amiga's keyboard and mouse.



Typing into Word from the Amiga, you begin to smile as you realise you have it all.

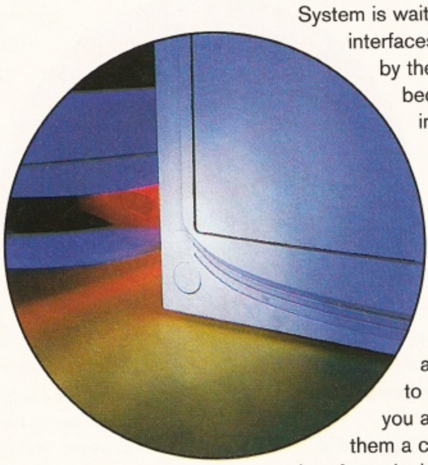
"Hi-Q have no **intention** of stopping development."

appropriate. So, if you had an FLI animation or a Wav sample, you could set it so that double-clicking would launch a PC anim viewer or sound player. The system we tested had an MPEG card which meant that DOpus could launch MediaPlayer on the PC, load the file and switch us to the screen automatically!

This is where the SCSI connection between the two machines comes into play, because it allows both machines to access the same SCSI devices. This means that you can have a CD-ROM drive in the PC case, which you can use on both machines with the Amiga launching on to the PC if it finds a filetype it can't handle. The same is true of files stored on SCSI hard drives, although because they are not ISO standard, there is a bit more trickery involved.

The SCSI hard drives in the PC have to be formatted as PC disks. The Amiga then mounts the drives using CrossDOS and a mountlist. The only difference this makes to Amiga users is that MS-DOS filenames have to be adhered to, meaning filenames of eight characters and three character extensions, e.g. picture1.jpg.

A1200 owners are advised to use the Surfin' Squirrel – the launch of the Siamese System is waiting for these new interfaces which should be available by the time you read this. This is because the new Squirrel includes SCSI Bus arbitration which stops the two machines trying to use the same drive at the same time and metaphorically banging their heads together.



Hi-Q are working their way through different SCSI adaptors on different Amigas to check compatibility, so if you already own an interface give them a call. Most new SCSI interfaces include SCSI Bus arbitration, but it's best to check, because without it, you won't be able to access the PC SCSI hard drives. Paul Nolan is working on a small utility that will be included. This will allow you to copy files from PC or Amiga IDE drives to the shared SCSI drives, thus enabling complete file transfer.

Also being added is the ability to send print jobs through the PC, which will mean sending the file to the PC's parallel port so you can have a printer attached to the PC which will accept data from either the PC or the Amiga. This way you won't need a separate lead from both machines and a switching box.



Speaking of ports, you may be wondering about serial options, given that the Siamese uses the Amiga's serial port. With the growth of the Internet, nobody will want to sacrifice the ability to access the WWW. This is not a problem, because the Surfin' Squirrel includes an extra, fast serial connection. Or you could have a modem card put into the PC.

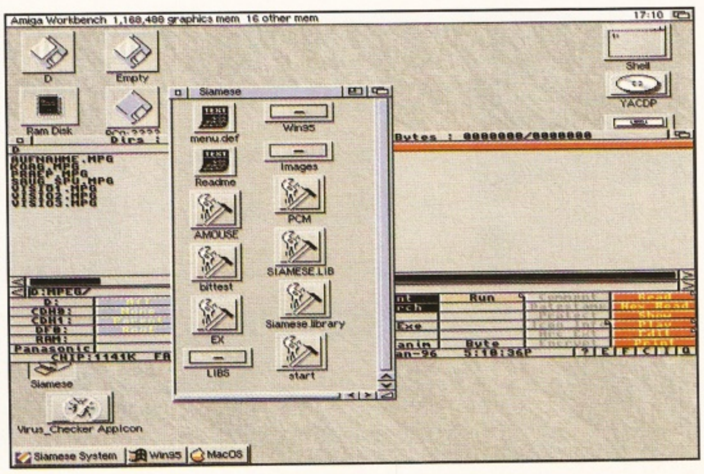
Audio connection

The other connection we haven't investigated is audio. The audio leads from the Amiga plugs into the sound card included in the PC. This means that you have volume and mixing control over the sound from both machines, which is important, because if both machines start playing sounds at the same time it can get noisy! The audio controls are on the PC and let you mix the two outputs or remove one so that only the Amiga or the PC is heard. The advantage of the sound card is that it incorporates a 16-bit sound sampler, which is a bonus for you. Sample on the PC and then chuck the file to the Amiga, load it into your sample or music package and you're away. You can use the PC for the donkey work and then nip back to use Aural Synthetica, Aural Illusion, and OctaMED.

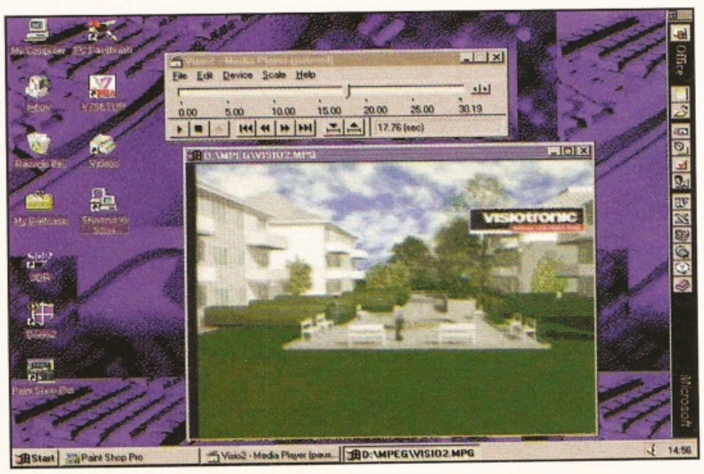
These are the initial specs for the Siamese System, but Hi-Q have no intention of stopping development. Paul will continue to improve the software and people who buy the system will be eligible for free upgrades for the first six months.

Stage two

The second stage of development is already planned and amongst other things will allow



The Siamese software on the Amiga, with Directory Opus reading a CD from the PC and about to automatically launch an MPEG player...



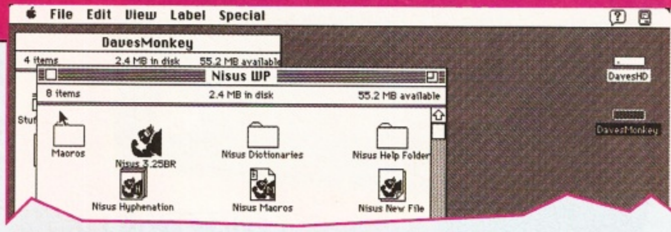
...and here's the PC playing MPEG having being started from the Amiga's DOpus when it recognised the filetype. Pretty neat.

A bit on the side?

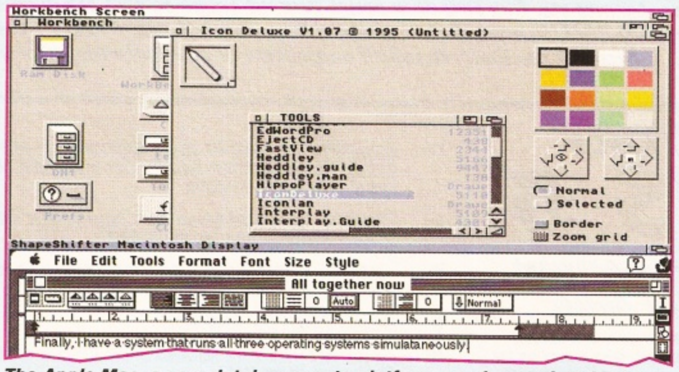
Now that the Amiga and the PC are in bed together, it's simple to make it a menage à trois and have a Mac on the go too. What the hell am I talking about? Well, the only other mass market platform that serious users are interested in is the Apple Mac (I'm using one at the moment actually).

The Mac uses the same processor as the Amiga, which has made it possible for a software emulator to be written. ShapeShifter, a Shareware package which can be registered for a piddling US$40, gives you the ability to run a Mac on your Amiga. All you need to do is read a set of Mac ROMs from a real Mac (you can buy a cheap second-hand one) using a program supplied. Then you can use your Amiga as a Mac.

The beauty of the program is that you get almost identical performance from the Amiga as you would from a Mac with the same processor. So, you can get a cheap Mac with a slow processor and use the ROMs on a fast



The Apple Mac running the software emulator ShapeShifter on an accelerated A1200. Now all three platforms are available to Amigas.



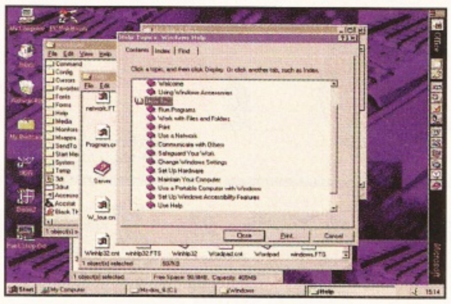
The Apple Mac, a completely separate platform, can be emulated in an Amiga window whilst multi-tasking. And be useful. Ah, ha, ha, ha, ha!

Amiga and, hey presto – a faster Mac! What you must remember though is that to use higher-end software, you need a higher-end Amiga. The program might work on a 4Mb A1200, but you won't be able to do that much. If you are looking at it as a professional application, you'll need an accelerated Amiga and as much RAM as possible. The RAM is very important because the Mac works in an annoying way and has to grab one continuous stretch of memory. It can't mix Fast RAM and Chip RAM. There are ways to maximise the amount available – ensure you don't launch any programs at StartUp and flush unused libraries from RAM. Or even better, you can boot with no StartUp and launch it from Shell.

On the subject of RAM, the program includes a command that needs to be inserted at the beginning of the StartUp-Sequence which sets the memory. Called Prepareemul, it has options for those users with Blizzard boards who might have had trouble with earlier versions.

ShapeShifter can use both Mac formatted drives and a specially designated disk file that it uses as a pseudo disk. Because the system software for the Mac has to be installed and comes on HD disks, you really need to have a high density disk drive too.

What can I say? The Amiga is no longer alone. It has built bridges to the other main platforms and has got a bright future as a base machine around which others orbit. It's up to Amiga owners to cross the bridges and use the technology now at their disposal.

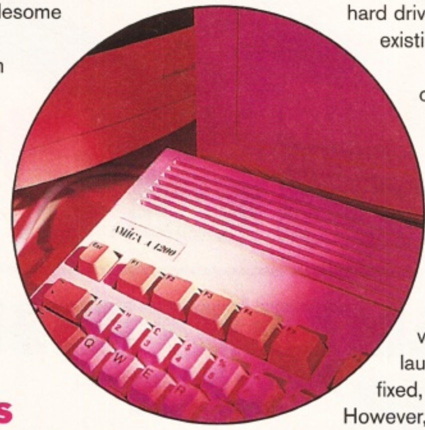


Windows95, which is required, might be easy to use, but thankfully there's a help guide.

direct access to IDE devices. This will mean that the Amiga will be able to transparently access any IDE drives, including the HD floppy and hard drives, on the PC. This is obviously a step on from using the transfer utility that moves files from those drives on to the shared SCSI drive. It will also allow you to make use of an Ethernet card on the PC, finally allowing the Amiga to get on to networks for the minimal cost of a PC Ethernet card, as opposed to the hundreds of pounds it costs for an Amiga card for boxed Amigas. This second stage is likely to have a minimal upgrade cost of around £30.

Hi-Q's aim is to provide a system that seamlessly links the two machines and it is looking pretty good. The step-by-step upgrade path through the PowerStation brings the product within the grasp of the lower-end user, while professional users who need the power immediately can buy a complete system lock, stock and barrel. Without doubt the people who are going to be very interested in this are 3D users. For years they have been begging for more power to cut down unacceptable rendering times. Now, for the price of an 060 chip (which is only twice the speed of existing 040 Amigas), they can have an additional processor. Because of the existence of 3D packages like Real 3D, Imagine and LightWave on both platforms, users can use the Amiga to model on, at the same time as the PC renders. Or they can have both machines rendering different parts, or even leave one machine rendering whilst they go and do something completely different on the other.

While the PC has the edge in terms of processing power, there are still some operations which are remarkably simple to do on the Amiga, but troublesome on the PC. In fact, some companies that moved from Amigas to PCs for processing reasons have kept their Amigas for some tasks. Now you can have the best of both worlds, using each machine for the areas they excel in. This is the beauty of two, independent machines working together.



System specs

Obviously, the PCs are available in many forms, but be aware that though the claim that you can use Windows95 on a 386 is technically correct it may send you to sleep waiting for it.

The lowest PC system that Hi-Q are selling incorporating the Siamese is a 486-DX2/66 and although it is supplied with the standard 4Mb RAM, they recommend that 8Mb are used. The machine includes a 16-bit sound card and SCSI interface, a high resolution accelerated graphics card, a 850Mb hard drive, keyboard and HD floppy, a Hi-Q introduction CD-ROM and the all important Windows95. We have also learned that the price of the PC SCSI interfaces used are set to go up and that there are only stocks of 150 at this price at the moment, so interested parties should put in an advance order to save money.

Alternatively, you could go out and try and source a PC cheaper than Hi-Q can offer and just buy the Siamese Pack from them, but you must make sure that you have the correct SCSI hardware, e.g. interface, CD-ROM and hard drive. This obviously stands for existing PC owners too.

More information can be obtained from Hi-Q themselves, or from their Web site at http://www.hiq.co.uk.

Although I've been using the Siamese System without hitch, I don't want to deliver a numerical verdict until the release version of the software is launched with the few bugs fixed, because it wouldn't be fair. However, if everything comes together as indicated, this is going to be an important and cheap upgrade path for Amiga owners. ■

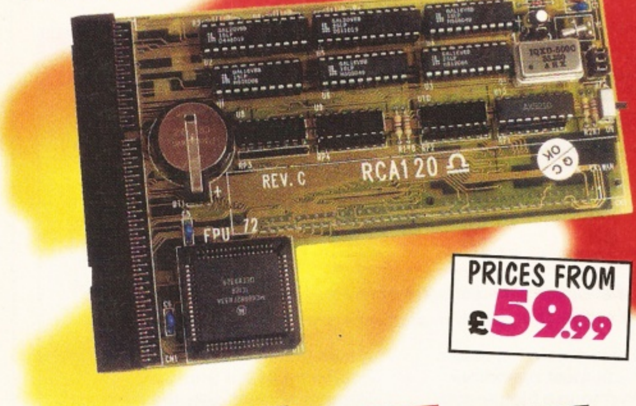
Siamese System

Price: £129.99
Supplier: Hi-Q
Contact: 01525 211327
Verdict: N/A

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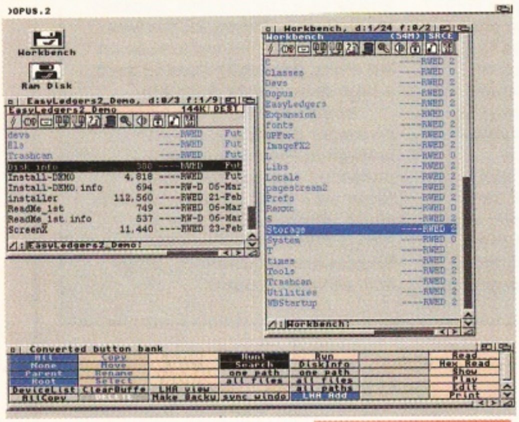
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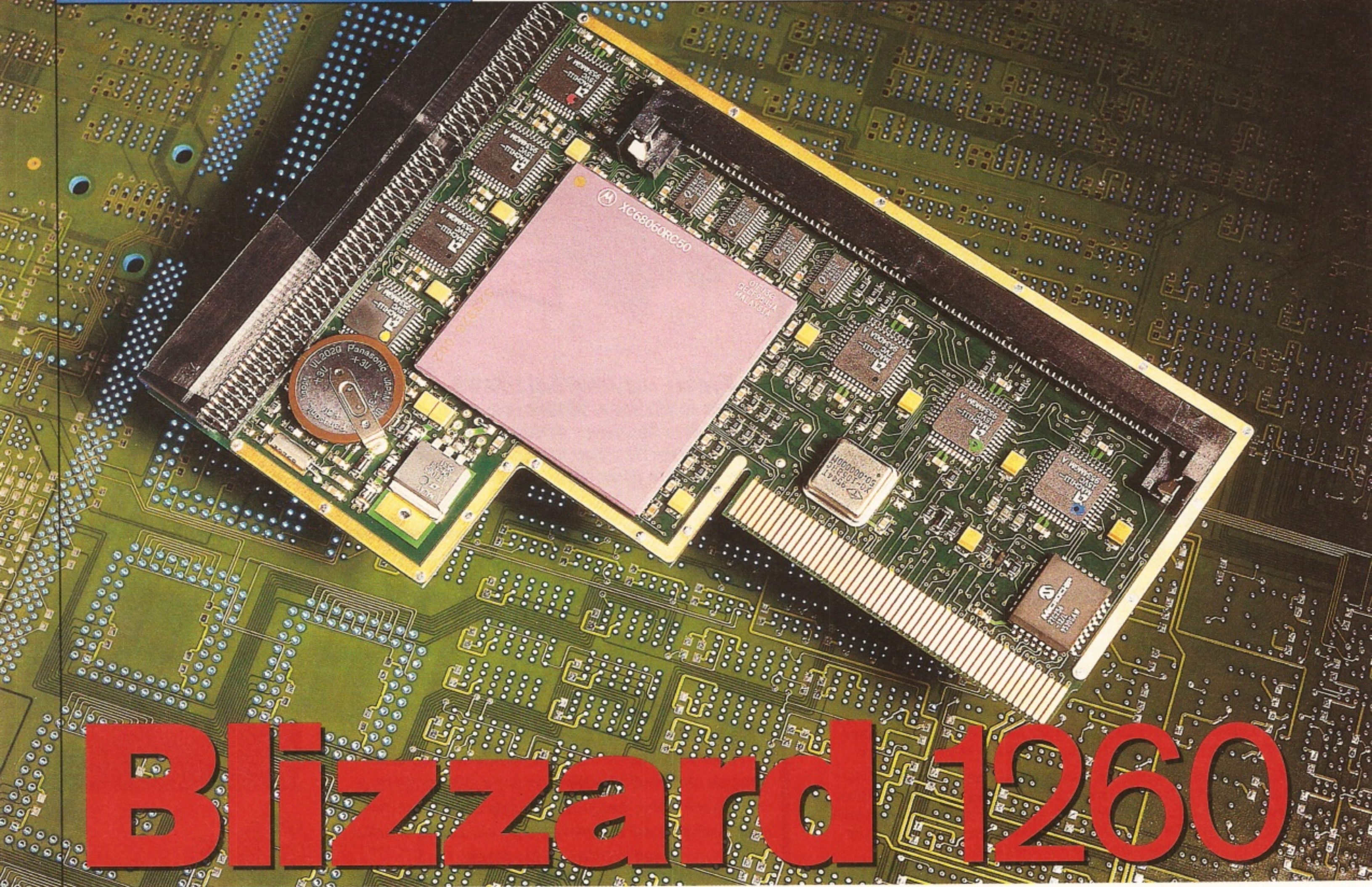
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X-LINK 28.8K	£229.99	£269.99

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Blizzard 1260

Could this be the fastest Amiga we will ever see? **John Kennedy** *takes out his stopwatch to find out...*

The Motorola 68060 is the end of the 680x0 family, a family with which the Amiga has had close links from day one. Each generation of processor has brought new features and valuable speed increases, and this is the end result: a super-scalar, deep pipelined processor with branch cache and dual on-chip demand paging MMUs, built using over 2.5 million transistors. It has two 8K memory caches for data and instructions and can execute two integer instructions (or one floating point and one integer instruction) and a branch instruction simultaneously.

To translate all that into English, this is one hell of a chip.

The Blizzard 1260 is the first 68060 based accelerator to be made available for the A1200, and it will be in direct competition with the forthcoming Falcon 68060. Previous high-powered accelerator cards were not feasible for the A1200 because of the size and the heat generated, but the latest Motorola chips run at 3.3 volts and so get less hot. Clocked at 50MHz, the processor is quoted as being able to run at up to 80MIPS (80 million instructions a second.)

The huge grey 68060 processor is soldered directly to the high quality board. There is no fan fitted, which means the chip can get hot – after an all-night rendering session it was too hot to touch. For serious long-term use, I would advise fitting some form of cooling system, because with the limited ventilation in the trapdoor area the temperature would be substantial. There is no socket for an FPU because, like the 68040, the 68060 processor has one built in.

A single SIMM socket is provided on the card, and single-sided modules of between 1Mb and 128Mb can be fitted. The smaller the SIMM, the more chance of being able to shut the trapdoor easily: I used a very slim 8Mb module and the door closed with only a slight bulge.

Memory hungry

There is only one jumper on the board, and this controls the mapping of the Kickstart ROM into RAM. If you have a large SIMM on board this is worth doing, because it provides a slight speed-up (because RAM is faster to access than ROM). Other features of the processor (caches and so on) can be controlled using a small CLI program supplied.

The fact that there is only one SIMM socket (a decision made for space reasons other than any cost cutting exercise) makes it imperative that you get the biggest memory module you can from the outset. Cleverly, the promised SCSI-2 expansion card includes a second SIMM slot which can accept a second module of up to 128Mb. When a 128Mb module is used on the expansion board, there is a 64Mb limit on the accelerator card itself: although having 192Mb of RAM is probably

Jargon buster

CPU: Central Processing Unit
The chip at the heart of a computer that actually runs programs by performing calculations and controlling the hardware which generates video and sound.

The Amiga has always used the 680x0 family of CPU from Motorola: the 68000, 68020, 68030, 68040 and now 68060. (The 68010 offered very little performance increase over the 68000, and the 68050 was scrapped on the drawing board.)

FPU: Floating Point Unit
A sub-section of a CPU (also available as a separate chip for 68020s and 68030s), which perform sums very quickly. Especially useful for image rendering and ray tracing programs.

MIPS: Millions of Instructions Per Second
A rather poor way of measuring a chip's performance (how can you tell the relative usefulness of the instructions?).

MMU:
Memory Management Unit
Part of a CPU that can provide virtual memory or 0re-mapping features.

MHz: Mega Hertz
A measure of frequency, in this case a 50Mhz chip is running internally with a clock that "ticks" 50 million times a second.

Thanks

Thanks to Jonathon (jonfroin@cix) for reporting his experiences with his Blizzard 68060. Jonathon reports that the game XTreme Racing runs like a dream, in 1x1 pixel full screen mode. Nice to know the hardware is being put to good use!

enough for the time being – only Lottery winners will be able to afford the SIMMS.

In she goes

Fitting the card was surprisingly easy: it was less of a tight fit than many other cards I've used. It's best to fit the SIMM first, and then gently manoeuvre the card into place.

It's usually at this point that I read the instructions and discover that programs have to be installed before the card is fitted, and this time was no exception. In order to operate, the 68060.library needs to be present on the Amiga's boot disk. One of the functions of this library is to look after the 68060's internal FPU and help it out with functions which were impossible to squeeze on to the chip itself.

At boot time I discovered that the rather old 3.5-inch IDE hard drive squeezed into my A1200 didn't like the new, faster processor and was unable to boot. All other systems tested with 2.5-inch drives worked perfectly, however. I suspect newer, 3.5-inch drives will also work (serves me right for not using approved hardware). I was forced to make a small floppy bootdisk which passed control to the hard drive as soon as possible, and to be truthful this didn't seem to extend the booting process by an unacceptable degree.

What's new?

When the Workbench screen pops up, nothing much has changed. The extra memory is visible in the screen bar, but everything else seems more or less the same. My favourite software (Imagine, Music-X2, Final Writer, AdPro) worked perfectly and another Blizzard 68060 user assures me that PageStream, Money Matters, ProGrab, FinalCalc and Studio 2 were also fully

Test results

Although SysInfo has many flaws in testing the speed of the 68060 (being out by a factor of two in the MIPs measurement is one), it can still be a useful tool. Look in particular at how the Blizzard compares with the A4000 fitted with both a 28Mhz 68040 Warp Engine and a 50Mhz 68060 CyberStorm. Due to a better internal design, the A1200 is also considerably faster at Chip RAM access.

LHA test

Archive 115,048 bytes of files held in RAM into an archive also held in RAM.

A1200	87 seconds
A4000/040	17 seconds
A1200/060	8 seconds

Imagine 4 rendering test

Render a transparent sphere with a stained glass texture with a resolution of 600x480, in three different modes. All times in seconds.

	Shade	Scan	Trace
A1200	93	2,474	5,840
A4000/040	16	1,009	2,338
A1200/060	4	176	503

Dhrystone test

Using program Dhrystone_2.1 by Torsten Hiddessen from Aminet.

A1200	5388 dhrystones/second
A4000/040	34546 dhrystones/second
A1200/060	82690 dhrystones/second

Other results calculated by author

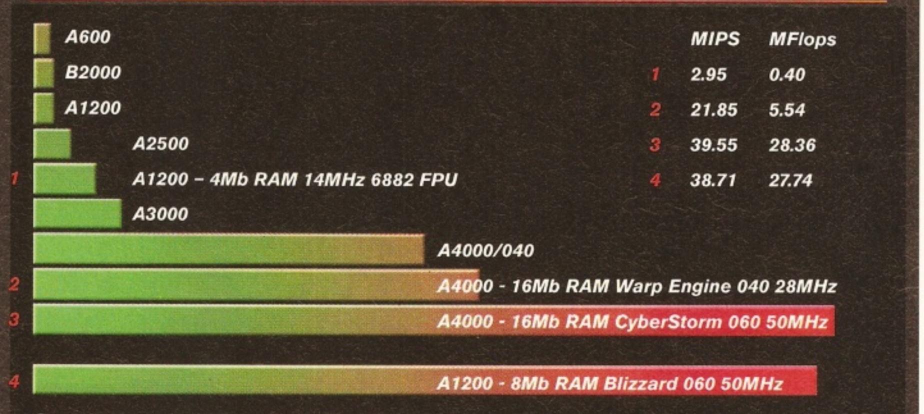
DEC Alpha AXP	427000 dhrystones/second
SUN SPARC 10	83000 dhrystones/second
PC 486/DX33	28000 dhrystones/second
A4000/40 (30Mhz)	38000 dhrystones/second

Animation test

Play back a 32-colour, low resolution 100 frame animation from memory with Viewtek, 100 times.

A1200	458 seconds (21.8 frames/second)
A4000/040	404 seconds (24.7 frames/second)
A12000/060	403 seconds (24.8 frames/second)

- **The A1200 was fitted with a 4Mb RAM board with an FPU fitted with no external clock.**
- **The A4000/060 was fitted with a Warp Engine card with a 28Mhz 68040 and 16Mb of 70ns RAM.**
- **The A1200/060 was fitted with a 50Mhz 68060 and 8Mb of 70ns RAM.**



Speed comparisons compiled using SysInfo.

functional. The big difference, of course, is the speed at which the programs execute.

Dragging icons and moving windows about the screen doesn't feel remarkably faster with a 68060 (after all, these tasks are mostly handled by the internal graphics chips), and the speed of the hard drive is much the same. However, in any case where raw processor power is required the A1200 has been transformed into a monster. You can see from the results table how much of a difference the Blizzard card makes to even simple tasks like making LHA archives. When attempting something as processor intensive as ray tracing, the results are amazing: between 10 and 20 times faster than an A1200 with some extra memory and an FPU.

With the Blizzard in place, the A1200 was depressingly faster than my own beloved 28MHz 68040 based A4000, and this makes the £600 price tag easier to swallow. It's absurd, but the new A4000s with 68040s are being advertised at £2,180, or £2,470 with a 68060. An 1200 with Blizzard card fitted in a third-party Tower case will still cost almost £700 less. Most programs and peripherals work perfectly with the 68060 processor, although some games may require it to be disabled. Pressing a key on the keyboard disables the card in case you want to play a game and discover your computer is too fast. Sadly, Breathless is one of the games that won't work. Another disappointment was that the Blizzard hits the Squirrel SCSI interface in the nuts, but apparently HiSoft has this problem licked.

With its remarkable speed and expansion options, the Blizzard 1260 is destined to become the ultimate object of desire for A1200 owners. The decision to keep the SCSI chip off the main board and on the expansion card (unlike the Falcon) has kept the price of the base unit under £600 and made an extra SIMM expansion possible.

Now that the final barrier holding the A1200 back has been broken, the best Amiga ever built can now become the fastest as well. The big question is will we ever see a faster Amiga? ■



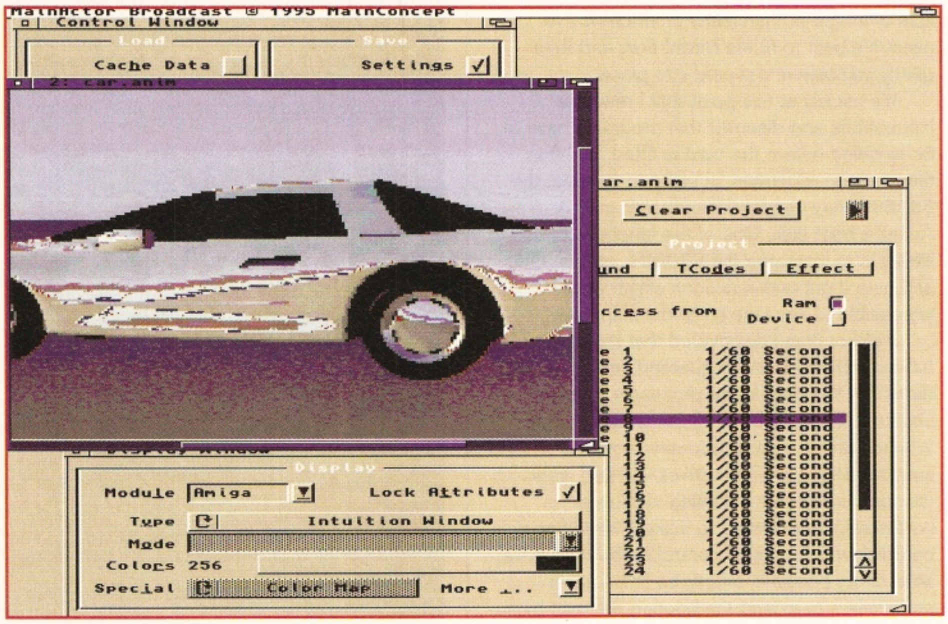
Blizzard 1260

Price:	£599.95
	SCSI Kit £99.95
Supplier:	Gordon Harwood
Contact:	01773 836781

Verdict: 91% Star buy

MainActor Broadcast

Graeme Sandiford *takes a close look at the latest release of Blittersoft's animation editing program. Is MainActor Broadcast worth the extra money?*



It is possible to play back animations from an Intuition window, although it is not advisable.

We'll cut straight to the chase here. MainActor has always been one of my favourite Shareware programs, so it's hardly surprising that it has been made into a commercial product. However, what is surprising is that MainActor Broadcast, the latest commercial incarnation, weighs in at a hefty £180 when its predecessor, MainActor Pro is available for only £50. So, the main objective of this review is, more so than with most products, to find out if MainActor Broadcast is really worth the money.

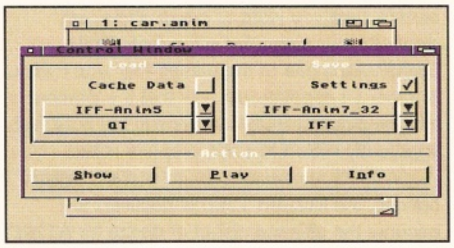
For those of you who have not had the pleasure of using MainActor before an explanation of its function is in order. The program's main purpose is not the creation of images or animations, but rather the editing and converting of them.

Using MainActor you can load in several animations and then bolt them together to create a single one. It is also possible to load in single frames. These features are obviously beneficial to professional animators who often have to convert their work to and from different formats as well as editing them.

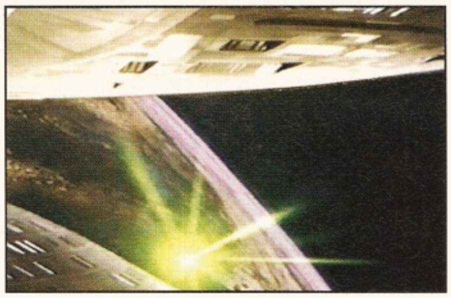
However, one of the features that distinguishes MainActor Broadcast from its predecessors (as well several more supported file formats) is the ability to add special effects to animations.

Perhaps one of the best features of the program is its uncluttered, yet highly configurable interface. This remains much the same as the original Shareware program – a window-based environment where you can open and re-size as many or as few windows as you need. In fact it is possible, through the correct ToolType, to use the program without opening its screen through its ARexx port. Although this requires a bit more expertise, it is great news for people who are running several applications at once and who need to conserve Chip RAM.

The window used most is the Project window. This is where you select which project/animation is currently being edited or displayed. Using this window it is possible to add effects or sounds, or adjust the timecodes of the animation. As with previous versions, this window also has a list of the frames in the



The Control window can be used to load and save a variety of file types and to view a project.



Editing long animations is made a lot easier with MainActor, but is it worth £180?

Format Heaven

MainActor Broadcast's biggest selling point is a vast array of supported animation and sound formats. Here's a list of those formats.

Sound formats

Fast Tracker
Med
OctaMED
Scream Tracker 3.0
SoundMon
Windows WAV
Future Composer
Multitracker
Octalyzer
SidMon 2.0
SoundTracker
JamCracker
NoiseTracker
ProTracker
Sonic Arranger
StarTracker4

Image formats

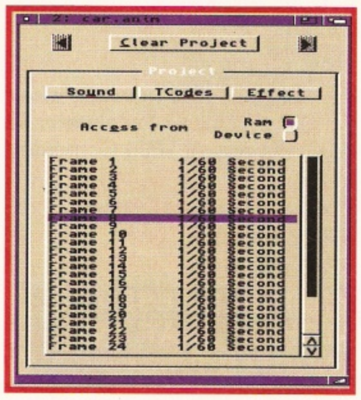
AVI
FLI/FLC
FF Anim3
IFF Anim8
JPEG
PCX
Retina
BMP
GIF
IFF Anim5
IFF AnimBrush
Merlin
Picasso
DL
IFF
IFF Anim7
IFF AnimJ
MultiPic
QT (Quicktime)

Special effects

MainActor has several effects module that can be used to jazz up your animations. Here's a list of them with short explanations of what they do.
3D-Stars: The good old starfield effect, as seen in screen-savers.
Background: A genlock effect which can be used with two projects.
FadeToColor: Fades the current project to a selected colour.
FadeToImage: Fades a project to an image.
FourInOne: Combines four projects into one single big one.
Rotate: Allows you to rotate an animation in 3D space.
Scale: Take a guess.
ScrollIn: Scrolls a project in from the top, bottom or sides of the screen.
ScrollOut: The opposite of ScrollIn.
Sequencer: Plays several projects in sequence.
Text: Adds scrolly text messages.
Wipe-Squares: Replaces one project with another piece by piece.

animation which can be selected, and acted upon, singly, as a whole or in groups. It is possible to determine the playback method for the animation – either from RAM or a device. Playback times from devices, such as a hard drive or CD-ROM, are significantly slower than from RAM, but this spooling means you can play animations of any length and not be limited by the amount of available memory.

If you choose to add an effect you will be taken to the Effect window where you can choose an effect from a list of modules. A helpful feature is a brief text description of what each module will do. Their functions are extremely varied – if you'd like to know what each one does have a look at the "Special effects" boxout. You are given control over how many frames will be used in the effect and the effect's physical size.



The Project window gives you control over several projects and frames as well as adding sounds and effects.

Sound effects

The Sound Effect window is where you can load in samples, test them and apply them to animations. It is possible to load more than one at a time and to copy them so they can be played more than once in an animation. You can adjust the volume of a sound, its balance and its starting frame. It is also possible to choose whether the sound should be evoked once only or at every loop of the animation. This is very useful for animations that are looped, but where you don't want the sound played each time the frame is played. As with the animation files, MainActor has support for an incredible number of file formats – for a full list of all the formats supported see the "Format Heaven" boxout.

The Timecode window enables you to set a frame timecode. A timecode is used to tell an animation player how long a frame should be displayed. However, this isn't applicable to all animation formats, so MainActor discards this information when saving in certain formats.

The Control window is another frequently used window. It determines how animations and single images are to be loaded and saved. You can choose a specific format to load or use the universal loader, as well as determine if the animation should cached (played back from disk). This is also where you play the animations back and obtain information about them.

As well as its large range of supported sound and animation formats, MainActor also has an impressive degree of support for display devices, and plenty of options. It has support for graphics cards like the CyberGFX, Retina, Merlin and Picasso boards and there are several options for native Amiga screenmodes. These include a full-screen display (the quickest), Intuition screens, and an Intuition window (the slowest).

Suits you, sir

Unfortunately, none of the native modes are particularly fast. Although animation optimisation is not its primary purpose it would be fair to expect some sort of speed increase in playback from a product costing nearly £180. However, if your Amiga is equipped with a graphics card some pretty impressive results can be achieved. These include high resolution animations being played from disk at a fair clip. The trick is finding the format and display that is best suited to your setup, which means taking into account whether your animation is a big one that needs to be played back from disk, and the capabilities of your display hardware.

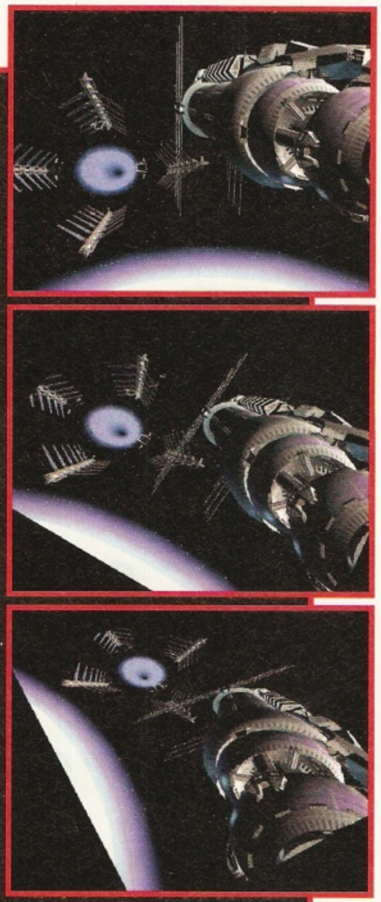
MainActor Broadcast certainly has its impressive points, such as its many image and sound display formats (which can be added to in the future thanks to a modular design); and as an animation editor it is probably the best program of its kind. Thanks to its intuitive interface and working methods it is easy to add, move and otherwise edit frames, as well as create large animations from smaller ones. Combine this with the ability to add sounds at specific frames and a range of special effects and you'll see why MainActor Broadcast is so impressive.

Unfortunately, it is not impressive enough to convince me to part with £180. If you are looking for an animation editing program you will do much better with MainActor Pro which only costs £50; unless you really need animation formats like DL and AVI, in which case you have little choice but to opt for MainActor Broadcast. ■

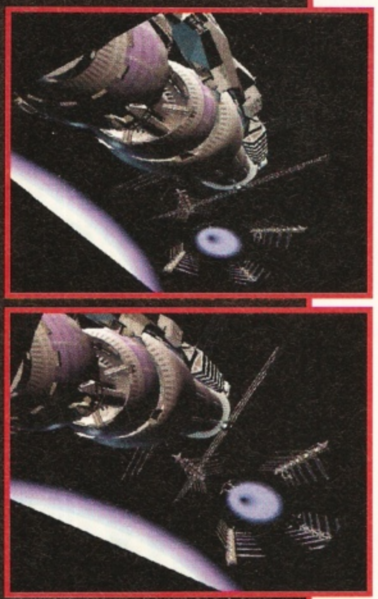
MainActor Broadcast

Price:	£179.95
Supplier:	Blittersoft
Contact:	01908 261466

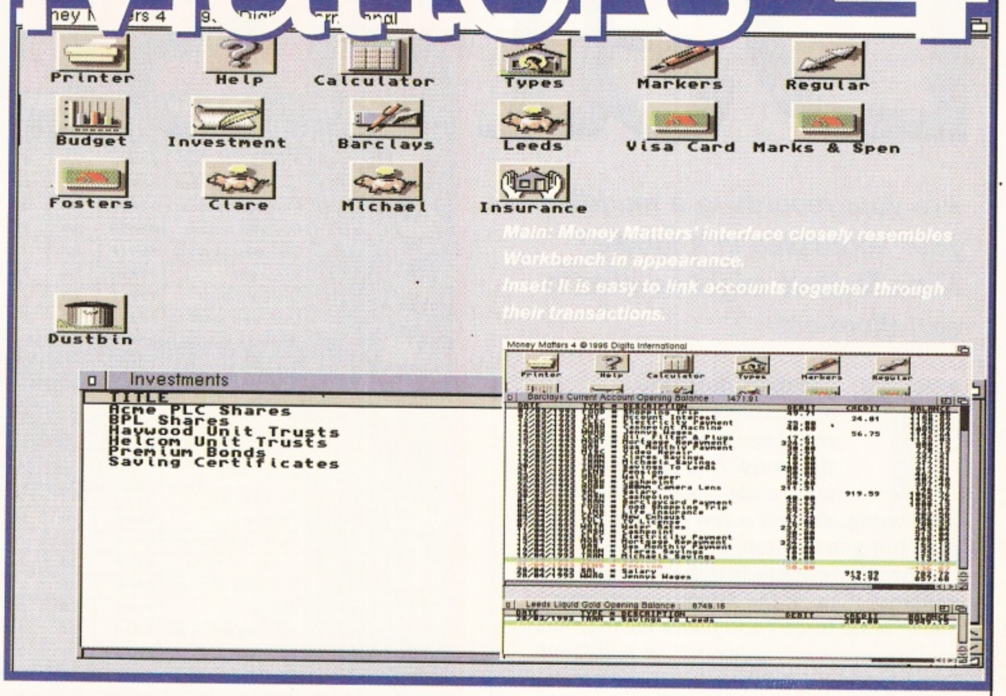
Verdict: 87%



"As an **animation** editor it is probably the best program of its kind."



Money Matters 4



Main: Money Matters' interface closely resembles Workbench in appearance.
Inset: It is easy to link accounts together through their transactions.

***Graeme Sandiford** stays out of the red with the help of the latest version of Digita's financial manager.*

The love of money may be the root of all evil, but money itself is a necessary evil. The most evil part of a monetary economy is keeping track of it. No matter what your situation in life you'll have to deal with the horrid stuff, whether you are single, married or even retired, you'll always have to spend money on something – hopefully having at least as much money coming in.

Keeping track of your money isn't easy when you consider all the different expenditures you make on a monthly, or even weekly, basis. This is where Money Matters and your Amiga can make things much easier for you. Money Matters 4 is the first version of the program since production stopped a couple of years ago. The program is intended to be of use to all sorts of people, even small businesses, and the price and interface are both indicators of this.

Expert performance

While it is possible to create a spreadsheet for performing similar functions, Money Matters has several powerful tools and methods of operation that aren't available in most spreadsheets. More importantly it has been specifically designed by experts to be as user-friendly as possible.

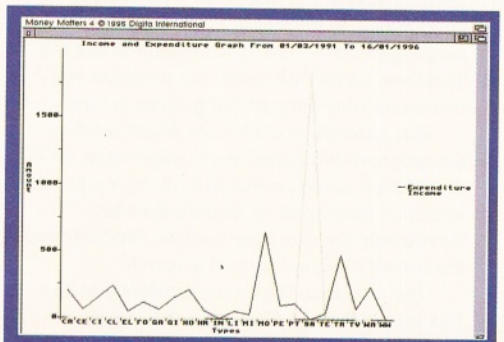
The proof of this is in the program's straightforward interface which closely resembles Workbench. As with Workbench, Money Matters' screen has a desktop with icons on it. When these icons are double-clicked on they open windows, but instead of containing the contents of a directory, the windows open different accounts and tools. The desktop also has a trashcan for deleting accounts, a printer icon for printing accounts and an on-line help icon which you can use if you get into trouble.

The trickiest and most time-consuming process when using a financial package is setting things up. Thankfully, Money Matters helps you by supplying six different example projects to use as templates. While these load in the existing accounts from the template project, they don't contain any transactions, except for a couple of example Regulars. So, armed with your example accounts you can simply enter your desired transactions.

Another benefit of using a template is that it already has several Types set up. Types are essential because they enable you to recognise the type of transactions you've made; they can also be used to tell the Amiga how the transaction should be handled. For example, one of the default Types is TRANS which tells Money Matters that the transaction is a transfer between two accounts, which then prompts you to add the accounts' details.

A typical project set-up might include a bank current account, a savings account, a credit card account and perhaps an investment portfolio. All of these accounts can be set up and linked together through their transactions. A good example of this is a regular transaction from your current account to a savings account where you would specify an amount to be transferred and its frequency, such as every month or every two weeks.

However, while it is good to be able to keep track of your finances as you go, prevention is better than a cure and you might want to try planning ahead. To achieve this and to improve your chances of staying in the good graces of your bank manager, Money Matters has a budgeting system. This tool enables you to forecast your likely transactions of a particular type over a given period of time, so you can plan any large expenditures, such as a holiday, in advance. The Budget requester has a useful button for calculating budgets automatically. Using this you can simply type starting and ending months and a value and the program fills in this value for each month. You can also make adjustments to the value over a period of time, such as a percentage increase or dividing a total amount over a number of months.



Money Matters has a choice of reporting functions, including charts.

Planning payment

The Calculator is an excellent tool for anyone considering a bank loan or a hire purchase. As well as performing normal calculator functions it has an in-built interest calculator and a loan calculator, which can work out how much you will pay in interest on a purchase or the payment per period for a loan, or its total amount.

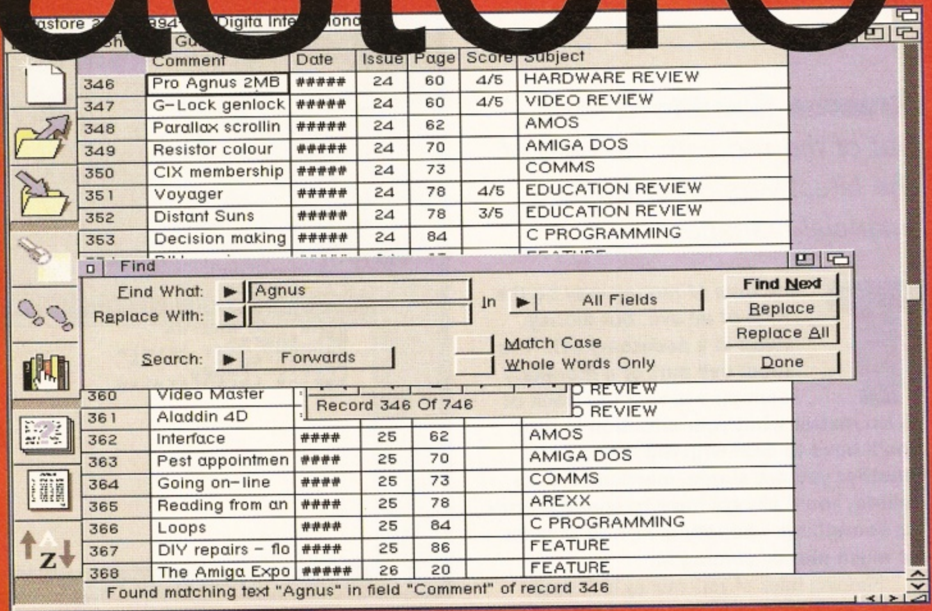
Money Matters 4 has several other useful features like the variety reports for listing transactions, your net worth and a budget chart. Overall this program is the ideal starting point for anyone wishing to improve their financial situation. Thanks to its flexibility and powerful features Money Matters 4 should also meet the needs of most small business. It will be interesting to see how it compares with the more expensive Counting House (reviewed next month). ■

Money Matters 4

AMIGA SHOPPER ✓

Price: £49.99
Supplier: Digita International
Contact: 01395 270273
Verdict: 90% Star buy

Datastore 2



The modeless Find option is very useful for scanning through large documents to find specific files.

Are your records in a muddle, your addresses in a fuddle? **Nick Veitch** *might be able to sort them out.*

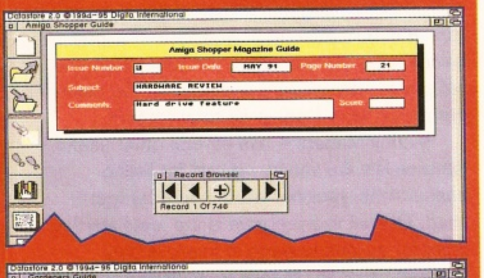
Thankfully, database applications are slowly catching up with the rest of the world. Just because you want a seriously powerful application, doesn't mean you want everything to be drab, boring and functional. Nowhere is this revolution more apparent than on the Amiga, which now has at least three contenders for the "most exciting database software" award: Final Data, Twist and the new, improved version of Digita's hopeful, Datastore 2.

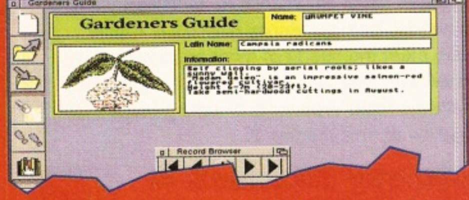
You are probably already familiar with Datastore because it received a well deserved 91 per cent back in issue 49. It is a simple, flat-file database, suitable for storing data like names and addresses, cataloguing your video collection and so on. The program is enhanced by its very graphical oriented interface, which allows you to customise the look of the database considerably.

Most of the features in this new version are concerned with the user interface rather than functions which expand the power of the database engine itself.

One feature which falls into this category, but which is probably the most significant addition is the "list mode" which allows you to view multiple records simultaneously. You can even select records manually in this mode, which makes including or excluding many individual records from a search easier. You can even delete, cut and copy records in this way.

Digita products have always had good printer support, and Datastore 2 is no exception. In fact it has been greatly improved by the ability to simply print out the on screen graphical representation of a record.





***Top:** The graphical layout of the database is ideal for many custom applications*
***Above:** Images can also be stored and displayed in Datastore.*

Lack of support

The most notable omission from Datastore 2 is ARexx support. ARexx is the macro language which has been a standard part of the Amiga Operating System since the A500+. This macro language allows you to automate tasks and exchange information between different applications. Without it, Datastore doesn't stand up too well against Final Data for real power use. It may be that most users will not find any need for ARexx, but that is not a particularly good reason to neglect it. Most airline passengers never have good reason to use the lifejackets under their seats, but there are rare occasions when they probably come in handy.

But generally, the interface keeps more to the programming guidelines in some ways, so it should have a familiar feel to it. Using the same approach developed for Digita's excellent Wordworth, the user interface has obviously had the benefit of many hours of research.

The modeless Find is an excellent addition. This means that the Find requestor stays open on the screen, even when you are not using it. So if you have to find a large number of specific records and then change something on them, you don't have to keep calling up the requestor, which not only saves time, but saves a lot of annoyance too. Searching is one of the things that Datastore has always been able to do proficiently, and quickly. The support of wildcards is very useful too.

In conclusion

Overall Datastore is not endowed with any great killer features, but it does have an easy to use interface and is very flexible in terms of display modes and so on. It is simple and straightforward, and it shouldn't take more than an hour or so to get the hang of it.

Most common database applications are very simple anyway, so you would perhaps not be gaining anything by going for something more complicated. If you don't want to do anything more than run a mailing list, catalogue your video collection or store your own encyclopaedic collection of different falafel recipes from around the world, there is probably not too much you are going to miss. It is competent, pretty and easy to use.

It has to be said though that apart from the features mentioned here, the general differences are perhaps not enough to warrant a full "2" suffix. If you have the original and are happy with it, you probably don't need this version too. ■

Datastore 2

Price: £49.99 (£14.99 upgrade from version 1)
Supplier: Digita International
Contact: 01395 270273

Verdict: 84%

SyQuest EZ-135

David Taylor *spins up the brand new drive from SyQuest that is aimed directly at the new Zip drive market.*



SyQuest are probably a bit annoyed at the time it has taken to get this peripheral on the market because it may have lost them valuable ground in the fight for the mid-range mass storage market. When Iomega's Zip drive was released, it was lapped up by the computer press, but SyQuest, whose traditional territory it was that the Zip invaded, have retaliated with this new spec drive.

The EZ-135 comes in many guises – internal or external, IDE or SCSI. We tested an external SCSI unit, which turned out to be simply an internal housed in a casing. That is often the case (excuse the pun), but as with units made this way the casing makes the hardware considerably larger than the unit itself. This doesn't make the drive look as attractive as the Zip, but it's performance, not aesthetics, that interests us.

Cable deficiency

Setting the drive up is easy enough. Simply plug the SCSI connectors and the power in and turn everything on. One thing that is evident straight away is that whoever designed the power lead was confused. The lead from the plug to the transformer box, big, black and bulky as it is, measures a respectable metre or two, but from the box to the unit, there's only centimetres. This causes problems if you have a crowded desk, because the power unit has to sit next to the drive, somewhere where the heat it produces doesn't matter. No storing floppies on top of it! Why a decent length of cable hasn't been used so the box can sit on the floor is a mystery.

However, when you've found a place to put it, all you need to do is mount the device using SCSIMounter. Then, as with any SCSI device, a disk appears on the Workbench that can be used as any normal drive. Obviously, you need to format it to AmigaDOS the first time you use it, as with any disk.

If you're familiar with SyQuest drives, you may be disappointed to know that they still haven't changed the way that cartridges are loaded and ejected. When you place one in, you must then close a lever for it to access the disk. When ejecting, you first press a button that electronically disengages the heads, then you open the lever to manually push the cartridge out. This seems a bit archaic nowadays and a fully electronic replacement would be welcome.

The thing about all these complaints is that they are really minor flaws. None of them affect the performance of the drive, which is very impressive. It offers a capacity, unformatted, of 135Mb per cartridge, which equates to 127Mb when formatted. This is appreciatively more than the Zip drive and compares extremely favourably when you consider the similar price tag of around £17 per disk.

The speed of the cartridge is also excellent. It's faster than some hard drives and will be perfect for most users. SysInfo rated it at around 1.2Mb per second, faster than the Zip drive.

The only other thing against the SyQuest is the cartridges themselves, which although approaching the slimness of the Zip disks, do not feel as robust. I wouldn't like to bet them against the Zip for withstanding shock. Still, I experienced no loss of data while I was using the drive and it got quite shaken around because I was using it at Christmas when it travelled over 800 miles with me. So maybe it's just unnecessary angst on my part.



Throughout this review I've compared the drive to the Zip, which I wouldn't normally do because every product should be judged on its own merits. However, since these two drives have been launched as direct competition to each other, it seemed of more use to prospective buyers to do it this way.

Buying guide

However, it's hard to recommend one drive over the other. They both have their pros and cons. The Zip drive seems the more exciting because it has the lure of new technology, whereas the EZ drive can be seen as just another SyQuest. However, remember that the EZ-135 does offer more storage space per cartridge and the few extra pounds that the unit costs can soon be recouped with the savings made on disks. This drive is also a shave faster.

The EXZ-135 is a great drive, but you should consider whether removable media is something you need. Consider your expansion plans carefully. This sort of money could get you a 1Gb hard drive. Getting that amount of storage with either the EZ or Zip will cost an additional £100. Still, if you're going to need to move data about or know you need continuously growing capacity, then this is recommended. ■

SyQuest EZ-135

Price: £209
Supplier: Gasteiner
Contact: 0181 345 6000

Verdict: 90% **Star buy**

Spirit Folio Lite



DTM sound sources still need to be combined and recorded. **Maff Evans** *tests a method that won't break the bank.*

No matter what fantastic add-ons and software you stick on to your Amiga to make it sound great, you still need to get everything recorded to let anyone else hear your wonderful musical masterpieces. One problem – how do you get your Aura cartridge, Amiga output, DTM sound module and voice all recorded together? Jamming several wires into one pair of sockets on your hi-fi probably isn't the best idea. No, what you need is a mixer.

If you have ever perused the shelves of a music shop or flicked through a music magazine, the prize of such items has probably brought on minor heart flutters, but it doesn't have to be all that expensive to get hold of a decent mixer – the Spirit Folio Lite is a case in point.

This little mixer features everything you need to start mixing in a diminutive little box costing just over £300 – far less than even the most conservative DTM sound module. Despite its unassuming size and budget price tag, the Folio Lite is a damned good little console.

Rather than sacrificing quality, Soundcraft has simplified the Folio Lite to make sure that it fits in with a small set-up. The 12 inputs are split across four channel strips. The first four are mono channels, with inputs for microphone or line level signals (such as an Amiga's outputs or a synth module). There's also an insert point on each of the mono channels, so you can add effects directly to a channel rather than tying up the extra outputs.

> "It's a well-built, **clean-sounding** and very competent console."



Gaining control

Looking down the strip, the mono channel has a trim pot for adjusting the level fed to the mixer from your source – useful for changing between mic and line signals. Next is the equaliser section. This is only a two-band EQ, rather than the three-band found on larger, more expensive mixers, so you can only adjust the amount of high and low frequencies rather than high, mid and low. Still, the EQ is tight and bright, so the sound quality doesn't really suffer.

Beneath the EQ are two auxiliary sends, which adjust the level of signal sent to the two auxiliary outputs. These are used for adding effects from external processors, with the FX return knob used to control the level from the processors. A handy cheat is that plugging a mono effects unit into the left return socket automatically pans to the centre, stopping your mix from sounding lop-sided.

The rest of the control strip is taken up with the pan control (for positioning the sound in stereo) and the level fader. Mind you, it's not actually a sliding fader as found on most mixers. To keep things small and inexpensive, there's a rotary dial instead, because most levels from synth modules are controlled using MIDI messages, so there won't be too much level adjustment going on during recording. It's more likely that you'll set the level knob once and just leave it there.

An extra button at the bottom, marked PFL (Pre Fade Listen), lets you monitor the input signal via headphones bypassing the EQ and fader controls – useful for adjusting the trim or checking a channel without affecting the main mix.

The stereo channels are almost identical to their mono counterparts. The controls are all the same (except there's balance control rather than a pan, obviously), but the input section is slightly different. There's no insert point, and only line-level signals can be used. But the inputs are still balanced (enabling you to use two wires to carry a signal rather than one, which helps to eradicate extraneous noises) which is a boon.

Over on the master section, two large knobs control the overall volume and the level of the monitor section (which is a separate output via speakers or headphones used for checking the mix without interrupting the main outputs), along with two large LED bargraphs to show the volume (the same type used on Spirit's larger mixers). Two smaller knobs control the effects level and a '2TRK' source. This is an extra stereo input fed directly into the mix, which can either be used as an extra sound source or as a feed from a CD player or tape deck. For example, you could use it to listen back to a recording you've just made or as a PA tape before your headline gig.

Value for money

With the attention to detail in the flexibility of the controls and the superb sound quality, the Spirit Folio Lite belies its compact size and low price. If you've got more than one sound source and would like to record them, this is an ideal addition to your DTM arsenal. It may not be as impressive as a studio desk, but it's a well-built, clean-sounding and very competent console for a more than reasonable price. Buy one and take your first fully-fledged steps into mixing. ■

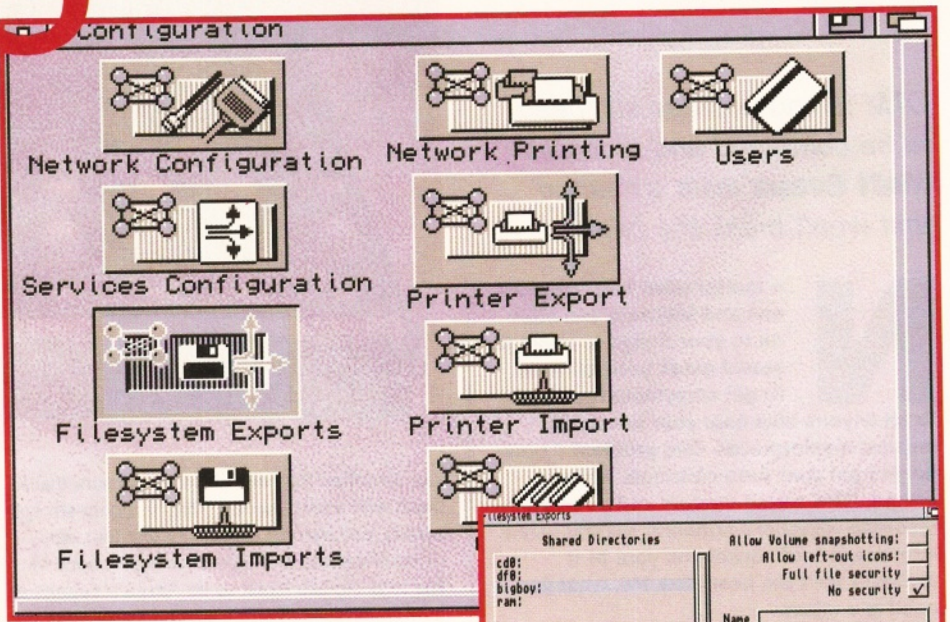
Spirit Folio Lite

Price: £312
Supplier: Spirit by Soundcraft
Contact: 01707 665000

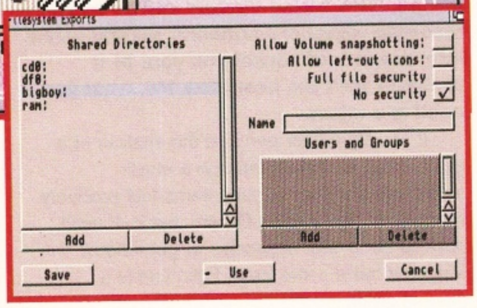
Verdict: 88%

Amiga-Link

A brand new program from AmiTrix makes networking your Amiga a piece of cake. **John Kennedy** *investigates...*



***Above:** Envoy has a large number of tools to administrate the network: including password protection and printer sharing facilities.*



***Right:** From within Envoy, the user can determine the level of flexibility of each device or directory and suppress certain features.*

One of the great omissions in the Amiga's development has been a reliable networking solution. In any serious environment being able to share data and peripherals such as printers is a high priority: unfortunately, whereas the IBM-PC has Ethernet, and the Apple has AppleTalk, the Amiga has been left out in the cold.

There are various ways to give an Amiga a degree of networking, but many require either Zorro slots and expensive cards, or home-made cables and Public Domain software: not always the most reliable combination. Canadian company AmiTrix is attempting to change that, with their combined hardware/software system, Amiga-Link. It's a networking system which works on any Amiga, and is still compatible with the most advanced networking software around.

Hardware interfaces

Amiga-Link connects to the Amiga through the floppy disk expansion port present at the back of every machine. The hardware consists of a small 23-way male plug and a BNC style twist-and-lock female connector. The electronics are built into the 23-way socket, making the interface extremely small and neat.

If there is already a floppy disk drive connected to your Amiga, the Amiga-Link interface can be connected to the pass-through port on the drive. If no pass-through is available, AmiTrix can supply a suitable splitter-cable.

The network cabling is standard co-axial 50 ohm cable. A BNC T-piece connector is attached to each disk port interface, and the cable connected to one socket and a special terminator plug to the other. If more than two Amigas are to be connected, extra T-piece connectors can be fitted. I used an A4000, an A1200 and an A600 for the purposes of this review and there was enough cable to comfortably spread them around the office. The total length of the cabling may be up to 100 metres in length, and up to 20 Amigas may be connected to the network.

With such an elegant hardware design it is unnecessary to open up the Amiga, and of course, no Zorro slots are required. This means any Amiga can be used: from A1000 to A4000 and everything in between, including a CDTV.

Amiga-Link's performance

A network based on the serial-based floppy disk port will never win awards for speed, although it will be faster than networks which rely on the Parallel or Serial port. AmiTrix claim a speed of 44K/s between 68030 based machines, and slightly less between 68000 based Amigas. The result is that when you open a directory and wait for the drawers to appear, it feels as though you are using a drive with a speed somewhere between a floppy and a hard drive.

Here are the results of some speed tests:

	Using Envoy	Using Amiga-Link
● Time taken to copy a file of 1,511,052 bytes from RAM on the A4000 to RAM on the A1200	1 min 35 secs = 15.5K/s	46 secs = 32K/s
● Time taken to copy a file of 1,744,765 bytes from CD-ROM on the A4000 to RAM on the A1200	1 min 33 secs = 18.3K/s	54 secs = 31.5K/s
● Time taken to copy a floppy disk (672,034 bytes) from the A4000 to the RAM of the A1200	4 mins 30 secs = 2.4K/s	3 mins 2 secs = 3.6K/s
● Time taken to copy a floppy disk of files from the A4000 to the RAM of the same A4000	53 secs	53 secs

Software support

Amiga-Link includes three items of software: the network driver software, the Amiga-Link file system and a copy of the famous (in Amiga networking circles) Envoy 2 package. The driver and Amiga-Link file system install from a single disk, and if you have a hard drive this only takes a few moments. The hardest part is thinking up a unique name for each of your machines.

Installing Amiga-Link on a floppy-only system requires the deletion of some files from the Workbench disk to make room: full instructions are supplied and it is not a tricky procedure. The advantage to using this file system over Envoy is that it runs in low memory on Kickstart 1.3. It also co-exists happily with AmiTCP – but more on that later.

Running the new file system is easy: you simply decide which devices you want to export (that is, make available to other computers) and

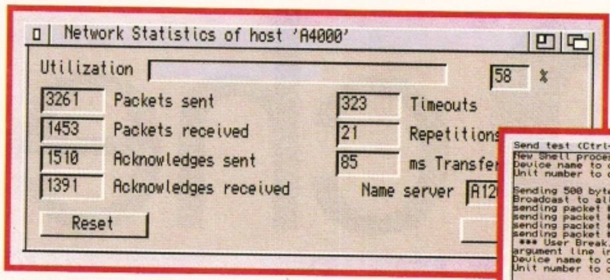
which you wish to import (that is, which remote devices you want to mount on your Workbench). For example, by marking the CD-ROM drive on my A4000 for export, the A1200 could read it as though it were connected directly: the icon appears on the Workbench like any other disk drive. Likewise, if I mount the A1200's hard drive on the A4000, its disk icon and any icons left out appear on the A4000's screen.

The poor old A600 in my office doesn't have a hard drive fitted, but with Amiga-Link it can be set up to import a hard drive partition all of its own. Although the partition is actually on the A4000, the A600 is convinced it has an internally fitted hard drive. As there is no room on a floppy disk to install the graphical import and export routines, a single CLI command needs to be entered – this can be added to the StartUp Sequence of course.

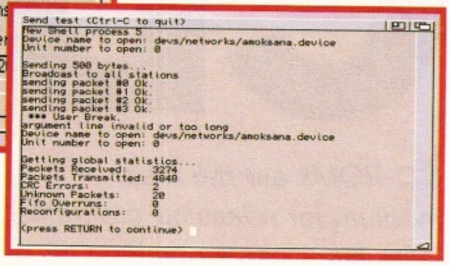
Once the remote devices are "mounted" they can be used in the same way as normal disk drives with only a few exceptions. In other words, you can still open them up with a click from the mouse, or use Directory Opus to copy files between them. You'll only discover the slightly different nature of the remote devices when you try something like using Diskcopy to copy a remote floppy drive: a "Device not of required type" error occurs. You can still copy the files individually, of course. The Amiga-Link file system also becomes confused if you mount a CD-ROM drive or floppy drive and then change disks: it refers to the disk's name rather than the device name.

A printer spooler program is also included, which means you can make the machine on the network send material for printing to an Amiga acting as a printer-server: so in an office, all the A1200s could share one laser printer.

The problem of removable media is solved by Envoy, the nearest thing to an official networking software for the Amiga. Envoy 2 is included in the Amiga-Link pack, and it is a heavy-duty package. At the expense of losing simultaneous use of AmiTCP, Envoy adds a bucketful of advanced features. As I said,



Left: ***Amiga-Link has a useful statistics window so you can see where your data is flowing.***



Above: ***More Amiga-Link goodies: this time individual packets of data can be checked to test network integrity.***

Below: ***Like Envoy, Amiga-Link allows you to choose which devices are imported and exported. However, it has fewer features.***

removable drives are now supported so when you swap disks on one machine they automatically swap on the remote machine(s) too. There is also full support for file security and groups: you can decide who can and can't access each drawer or device on your system, with password protection.

Envoy also has an excellent printer spooler included, and overall does everything that Amiga-Link does, but more in-depth. This could explain why Envoy seems to run considerably slower than Amiga-Link's own file system. Envoy also requires Workbench 2.04 or better, which is another reason why it won't suit everyone.

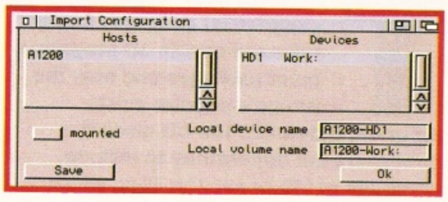
TCP at last!

If you recall from the networking feature in AS56, the Amiga has a TCP/IP suite available called AmiTCP. TCP/IP is the protocol used by, among other things, anything connected to the Internet and so it is useful for shifting data around.

The network driver included with Amiga-Link is SANA-II compliant, so it's possible to support AmiTCP. This makes all sorts of very powerful networking features possible for tinkerers like me – you can use FTP and Telnet to link different Amigas, and even set up gateways to link Amiga-Link networks into PC networks.

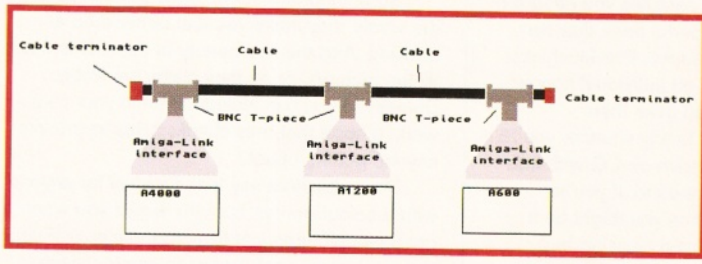
Networking for me?

The ability to share data quickly between machines is a godsend. If you have one high-end Amiga and some slightly less well-endowed



examples, you can now share the facilities more evenly between machines. Keeping important files safe on one machine, and regularly backed up, is only sensible on larger projects. Further, a network makes such things as "render farms" possible. If you need to create a large animation, you could buy a fast Amiga – but sometimes it's cheaper to buy several slightly slower ones and network them together. The price of a new A4000 Tower means that an A1200 fitted with an 040 or 060 card could be a better machine for rendering: and with an Amiga-Link network, frames and other files can be quickly sent backwards and forwards.

The relatively high price of Amiga-Link might push it outside the budget of many potential users but it's also exactly the sort of product the Amiga has been waiting for. ■



Each Amiga in the network (there can be up to 20) is connected to the cable via an interface attached to the floppy disk expansion port.

Amiga-Link

Price:	$299 (US dollars for two station version $135 for one station expansion)
Supplier:	AmiTrix Development
Contact:	001 403 929 8459
E-mail:	sales@amitrix.com

Verdict: 85%

Networking alternatives

Commercial networking systems for the Amiga are hard to come by, which makes Amiga-Link special enough. Dedicated Amiga users will already have played with some alternatives, such as Parnet (a networking system which uses the parallel ports) and Sernet (an adaptation which uses the serial ports). These solutions, although cheap, suffer from serious problems. First of all, they tie up particularly useful ports on the back of the Amiga – many people want to network their systems so that a printer or other peripheral can be shared.

Secondly, these budget solutions are not particularly fast. Amiga-Link is no Ethernet, but it is a lot faster and more stable than the PD solutions. Unlike many PD systems, Amiga-Link also works on Kickstart 1.3 machines, which means that CDTVs can be called back into service. Finally, Amiga-Link allows up to 20 machines to operate on one network with up to 100 metres of cabling used. I haven't seen a PD network which can support more than two machines.

If there is a serious competition to Amiga-Link, it applies only to the Big Box Amigas with a spare Zorro slot. It's possible to buy an Amiga Ethernet card for these machines from companies such as Blittersoft (☎ 01908 261466). Alternatively, with the addition of a GoldenGate2 card, standard PC NE1000 and NE2000 Ethernet cards may be used.

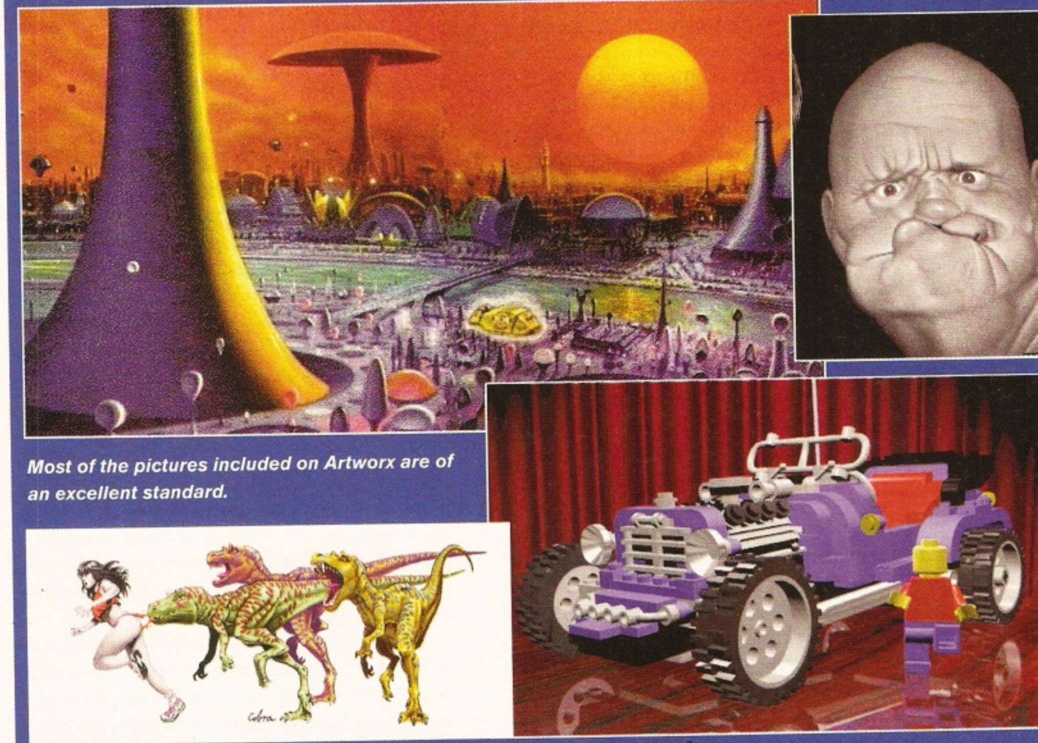
The big advantages of Ethernet are that it's extremely fast and it's also compatible with most other computer, such as PC and Apple systems.

However, for a Amiga with no Zorro capability such as an A1200, Amiga-Link is hard to beat.

CD check out

CD-ROMs are the ideal medium for releasing programs. With more users owning CD drives, the extras these discs offer should prove popular. **David Taylor** *explains why.*

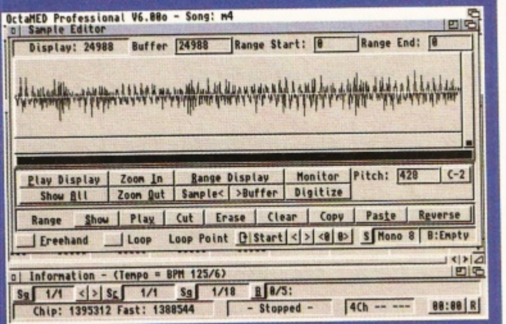
There are quite a few full commercial packages being released on CD: 3D programs, paint packages and now the Amiga's popular music program, OctaMED. The CD gives the publishers the opportunity to include hundreds of Mb of support files, which will make this package very attractive to Amiga musicians.

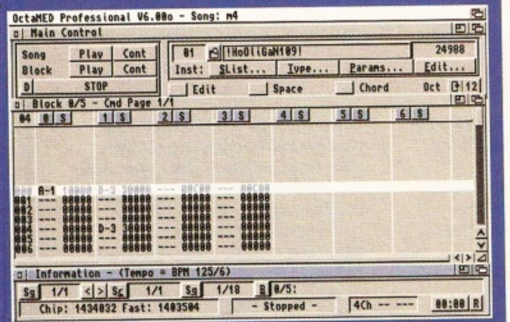


Most of the pictures included on Artworx are of an excellent standard.

OctaMED 6

You will find the full OctaMED program, version 6 (the latest release) on this CD. There's not much point reviewing the program itself here. It has been around in other versions for ages and every Amiga musician must have seen one version of it. Even when released on floppy and costing £10 more than this CD, John Kennedy rated it at a staggering 95 per cent in AS54.





The OctaMED 6 CD is excellent value for money; it includes loads of modules and the entire Walkabout sample collection.

Now it's available in a release that includes tonnes of modules created using OctaMED, but more importantly, it has the entire Walkabout sample collection. Walkabout samples must be almost as well known as OctaMED. They are high quality samples taken from musical instruments from around the world and include not only the normal, basic samples you need but also some weird and wonderful ones that can give your music a unique sound. Previously you had to buy these samples on individual floppy disks – they were a bargain even then.

It's almost impossible to say whether you're buying the OctaMED program on CD with free samples or the other way around. If you've already got OctaMED 6 then you might be a little gutted because this is an amazing buy. Maybe the publishers will offer the CD more cheaply to registered users, but even if they don't it's still tempting.

The package also comes with a full printed "Get you started" tutorial booklet. If you're a musician who has always wanted OctaMED, but couldn't afford it, then the price drop and additional files will have you raiding your piggy bank.

OctaMED 6

Price: £29.95
Supplier: Weird Science
Contact: 0116 234 0682
Verdict: 97% Star buy

Artworx

Yeah, another CD released with a load of pictures on it. Whoopee! Except that Artworx is a very reasonable price and includes only full colour images. What's more, they aren't just photographs; they are all pictures produced by pretty talented people.

Sure, there are some ropey pictures, but on the whole they make you feel rather crap at drawing. And the real beauty of this CD is that all the pictures, or so they claim, are Public Domain so you can include them in your own work. (I hope that they checked this to prevent anyone getting upset.)

The publishers say that it's ideal for anyone with a colour printer, but why would you want to get these pictures just to print them out? There are much more useful ways to employ these images. If you're into multimedia, then this CD is a real boon for brightening up your "pages" and the same goes for DTP (which is where the colour printer comes in). The pictures come in a wide range of categories. I made extensive use of Artworx as a source when I was reviewing M.M.Experience for Amiga Format.

A brilliant source CD for many users. ■

Artworx

Price: £9.99
Supplier: Weird Science
Contact: 0116 234 0682
Verdict: 90% Star buy

JTS 850

An easy-to-fit 3.5-inch drive that offers 850Mb for under £200. ***David Taylor*** *gets in on the action.*

The problem with fitting 3.5-inch drives to A1200s has always been that you need to cut away at the Amiga's shielding. This has meant people have either gone for the smaller, 2.5-inch drives which cost more, or they have had to pay a fitting fee from suppliers. However, this new drive can be fitted without modifications to the Amiga and yet it offers the competitive pricing of 3.5-inch drives.

The JTS 850 drive comes with a sheet of fitting instructions, but most people who've seen the inside of the Amiga before should be able to work it out for themselves. If not, then the instructions guide you through. All you need to do is lift the keyboard up, fit the data cable and slot the drive in. Then take the floppy power lead off the board and add the new one which splits the power to the floppy and hard drive.

Getting the cover of the machine back on is quite tricky. One of the solutions is to remove one of the legs from the hard drive, although this isn't supposed to be necessary. To do this you need a torque screwdriver and it's simple. If you do this, which I did, you are advised to secure the drive by fitting a screw through the Amiga's casing to hold it. To be honest, the drive seemed so secure that I haven't bothered.

Alternatively, because this drive is a sealed unit, there's no real reason why you can't run the leads out of the computer and leave the hard drive out. Normally that's a big no-no, but I can't see any reason why it shouldn't be done with this one.

Because of the size of the drive, you can only really power one external floppy drive as well as this, so you can't have large daisy chains.

The speed of the drive is wonderful, around 1.5Mb/second, and so is its capacity. It's cheap, easy to fit, even by novices – if they take their time. It's more or less an ideal hard drive. Oh, and it comes ready prepped, formatted and with 25Mb of free PD utilities to get you started. ■

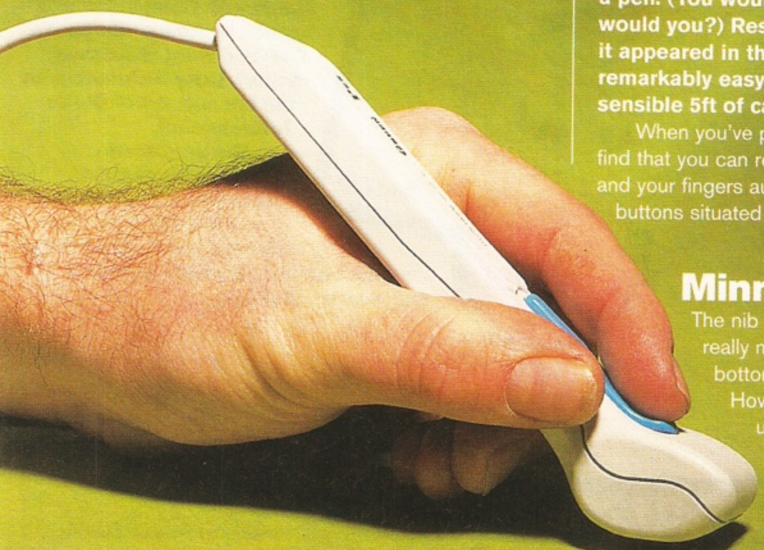


JTS 850

Price: £199
Supplier: Hi-Q
Contact: 01525 211327
Verdict: 90% — Star buy (Amiga Shopper)

Green Pen

Will this new controller make others green with envy? Or not? ***David Taylor*** *finds out.*



I have a real talent for breaking mice at the moment, so another one is always welcome. The Green Pen, however, is a different type of mouse altogether. It is shaped like a pen. (You would never have guessed, would you?) Reservations abounded when it appeared in the office, but it's actually remarkably easy to use and comes with a sensible 5ft of cable.

When you've plugged the Green Pen in, you find that you can rest it pleasantly in your hand and your fingers automatically find the two buttons situated at the base of the pen.

Minnie mouse

The nib of the pen is the ball that really makes this a mini mouse at the bottom with a shaft attached. However, the accuracy and usefulness for graphics is countered by the low 250dpi specs. But, once you've got over the difference between this and a normal mouse, you'll find it can be used quite seriously as a mouse replacement.

However, there are two very major problems with the Green Pen. Firstly, the left button on the one I had for review soon developed a tendency to stick, which is not acceptable. Secondly, I broke mine. All I did was accidentally drop it about a foot and suddenly the ball seemed to be knocked out of place and I couldn't use it at all. Downer.

Green with envy

If you are looking for a replacement mouse, the Mega Mouse from Golden Image is much more reliable, cheaper and has a better dpi. Oh, if you wondered why this is a "Green" pen, it's because it comes in recyclable packaging. Whoopee. ■

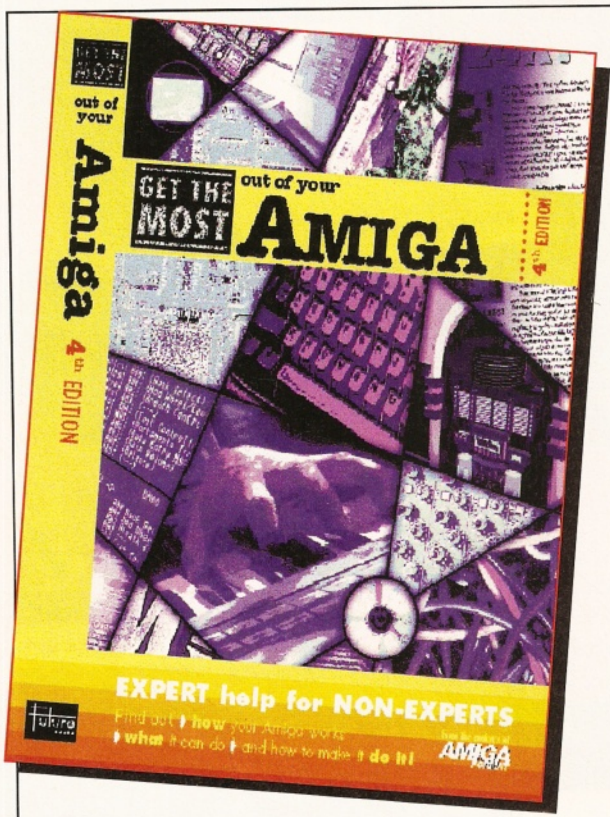
Green Pen

Price: £19.95
Supplier: Golden Image
Contact: 0181 900 9291
Verdict: 30%

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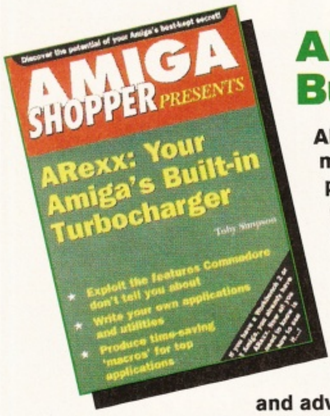
What your Amiga can do
Section B helps you to explore in depth the myriad of possible uses for your Amiga, for example DTP, Comms, programming, Amiga games, music, graphics and multimedia. Again, there's a full glossary at the end of the section to ensure that you are familiar with all the technical terms.

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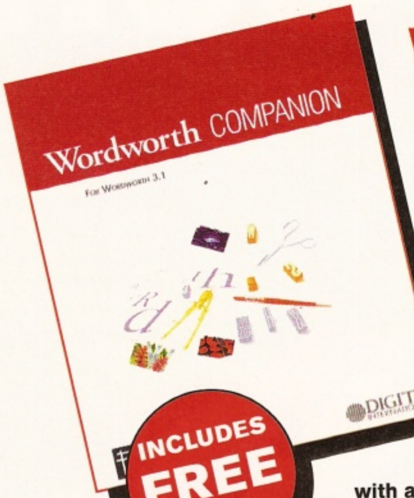
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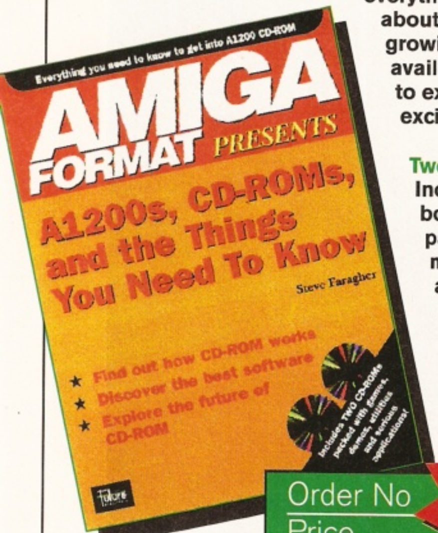
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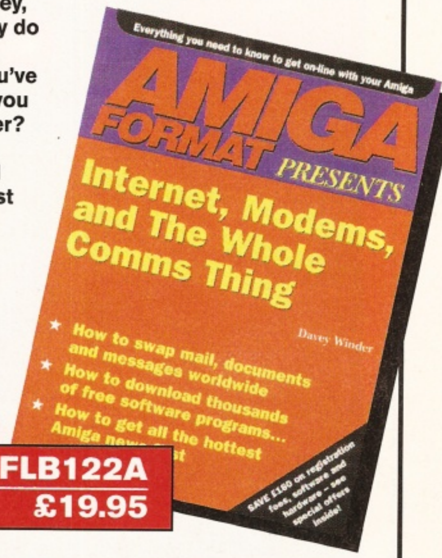
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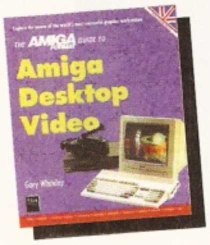
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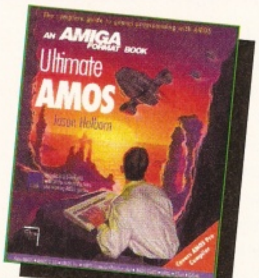
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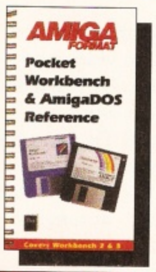
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ASHP60



We were rather taken by the lighting on this image produced on an A4000 with 14Mb RAM by Gary Moffat. Gary also supplied the LightWave object for this month's Coverdisk. Remember, even if your picture doesn't win here, you may still see yourself in lights because we try and use your efforts elsewhere in Amiga Shopper. If you want to win £25, send your picture as a JPEG to: **David Taylor, Amiga Shopper, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.**



The picture competition is starting to turn into a one or two horse race. Let's have some more entries, even if you've submitted other images earlier that haven't won. They don't have to be 3D images either. Any picture that you have created on your Amiga will be considered.

This month the Amiga Answers section deals with all the specific questions that have been directed at us as well as trying to solve some of the more common queries.



Paul Overaa is our Operating Systems programming expert. He has written several books, including: Mastering Amiga Assembler, Mastering Amiga ARexx and Mastering Amiga C. His main interest is in program design and he is heavily into the music side of the Amiga. Paul's other interests include red wine, maths and wind-surfing!



Gary Whiteley is our expert on video and graphics. He regularly produces work for films and TV. Gary has also written several books on his favourite subjects – amongst them is Amiga Desktop Video, published by Future Publishing (call ☎ 01225 822511 to order a copy). Gary also regularly reviews new products for Amiga Shopper.



John Kennedy is our hardware and music expert. John has written Supertests and features alike for Amiga Shopper in the past, including the CD-ROM Supertest in issue 49 and our monitor Supertest in issue 55. He takes a look at the new Blizzard 1260 board over on page 38 and following on from his networking feature in AS56, he reviews Amiga-Link on page 48.



Larry Hickmott is our DTP and word processing expert. He produces his own DTP magazine called Em and has written several books, including The Wordworth Companion for Digita and Future Publishing's books division. This month Larry answers your queries in Amiga Answers and has also written the printer driver feature on page 28.

AMIGA SHOPPER

Amiga Answers is one of the most popular sections of Amiga Shopper – if all the letters and telephone calls from readers we receive in the office are anything to go by. And our panel of experts have been kept busy answering your queries again this month. We have another mixed bag for you, we hope that you will find them useful. There are also a couple of frequently asked questions included this month.

Too much jargon

Uncrunching the Coverdisks has caused me some irritation. I wrote to AS back in 1994 on the same subject (Issue 36) concerning a problem with the arp.library. You flippantly say "read the documentation!" Which documentation? The Workshop manual? The magazine article?

It's OK if it is your trade or you are a diehard enthusiast. This jargon gives me heartburn and I know I'm not alone. I was tempted back to AS with the Introducing Workbench disk, but although it loaded easier than those in the past, when I tried out the advice, I still got "Unable to open your tool :c/more", which is French to me.

John Hateley
Dunstable

OK. Well, it seems we've got it half right, eh? You can't possibly be having any problems unpacking the disks, because it is all automatic. All you need to do is have some spare disks. They don't even need to be formatted.

You are having trouble with the Amiga's Workbench. The library problem is a common one. Whenever you have a missing library, it is because the required library is not situated in the libs directory on your Workbench disk. Normally, if it is a PD library, you will find it in the program's directory. To see these files or directories, you may need to select "Show all files" from the Window menu on Workbench.

The problem with "more" is simple too. In fact, the Amiga is telling you what the problem is. The document is trying to load the document reading program "more". However, it is looking in a specific place for more: the ":" denotes that it is searching on the disk on which the document is situated and the "C/" means it is looking for it in the C directory on that disk.

You can therefore either copy "more" from your Workbench disk – found in the Utilities drawer – and you may need to create the C directory on the document disk; or you can change where the document looks for the program "more". To do this, click once on the document icon, then select "Information" from the Icon menu on Workbench. A window will appear with information about the icon, including its "default tool". There you will see the ":C/more" line. Change this to "Sys:utilities/more" and press Return, then save the changes. Now it will load the program from Workbench.

We can't change these icons ourselves because of Copyright reasons. But you should be able to do this easily, and take this advice and apply it to similar problems. And when I said "Read the documentation", I meant read the documentation that accompanies the programs – the doc files, as you are obviously trying to do. ***Dave***

Answers contents

If you're looking for a particular problem, this handy index will help you find the answers you need:



For more information about which genlock is best for you, read our genlock Supertest from AS50 (☎ 01225 822511 for back issues).

More Viper troubles

Concerning Mr. D. Domanski's letter in Amiga Shopper (Dec 1995; "A Sorry Tale") relating to the problem of his Rendale genlock not working with his Viper 030/4Mb RAM card and your request for more information from readers.

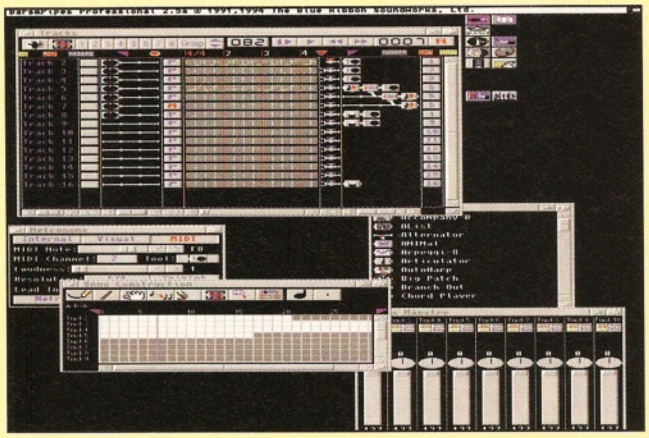
I have a similar set-up (A1200, Viper 2 28MHz/4Mb card), but have a different genlock, namely the German-made Electronic Design Y/C genlock, which you may already be aware of. I use Scala MM400 for titling, etc. and, apart from the very occasional guru whilst my tapes roll up to speed, or when inching my source VTR, my setup works OK.

I would assume that this occasional guru on pre-roll is due to a momentary loss of sync, since in my experience this has happened before when I used my A500 and an earlier genlock for titling. Am I right on this?

Incidentally, I also ordered my Viper card from Gasteiner (because they sell them at a good price), however, the 4Mb memory was faulty and was eventually changed. My experience is that Gasteiner's backup efficiency needs considerable improvement; for example, when I rang to return the item I was told I needed a returns number and to call the following morning for the number. When I rang back the same man answered the telephone and gave me the number!

Also, I ordered a Viper 2 28MHz/4Mb board because I wanted to have the flexibility to add more than 8Mb of RAM, since the Viper 2 can hold up to 128Mb of memory without causing problems to the PCMCIA slot. However, the box

▶ 56



Bars & Pipes is a massive package which needs to be used with a fast Amiga for the best results.

the Viper came in didn't say which card I'd received and neither was it stamped on the card. Even the receipt didn't mention which model of card I'd purchased.

I called Gasteiner to confirm which board they had sent me and then, to be completely sure, I called Power Computing to double check and was told that "if the memory SIMMS are on the back of the board then it's a Viper 2".

Perhaps it would've been easier if the card was marked with the model number in future?

Mr G. P. Scott
Bognor Regis, W. Sussex

Yes, it is quite possible that the gurus are caused by a momentary loss of sync during pre-roll, but probably only if your taped material is discontinuous. On the other hand, (even though you say you had this problem before with your A500), it could be a different problem, in this case being caused by the Viper and the A1200 being in conflict over the Amiga's sync signals. ***Gary***

Basic MIDI programs

Is it possible to create a program which could edit the parameters of a synthesizer using BASIC?

Jiro Narita
Del Iztacalco, Mexico

It is certainly possible but much depends on how familiar you are with the technical side of MIDI communications. Providing you are happy with the technicalities of MIDI (i.e. know what the various bytes mean and so on), it can be instructive to write your own MIDI software – even if you only use it for experimental purposes. Having said that, Sysex message collection can be a little harder to get working (particularly if very large messages are involved), and unfortunately it will be Sysex message transmission and collection that is needed for your purposes.

Much depends on the synth you are working with and often the best idea is just to try it and see You should find the formats of the Sysex message required documented in your synthesizer manuals. If you can't then write to the manufacturer asking for this information!

The overall scheme for MIDI communications from a BASIC-type language is straightforward. MIDI serial port access can be achieved using the Amiga's SER: device (which means that the complexities of accessing the underlying Amiga serial port are transparent).

All the programmer has to remember is that Preferences needs to be used to set suitable serial port characteristics, namely: a baud rate of 31250 with no parity, no handshaking, and just one stop bit.

The file handling approach of most BASICs is straightforward and the sequential file handling input/output conventions are that you 'output TO a file' or 'input FROM a file'. For example, to collect serial data using HiSoft BASIC on the Amiga a sequential file for 'input' can be used like this:

```
OPEN "SER:" FOR INPUT AS #1
```

Data collection is then carried out by reading bytes one at a time using BASIC's INPUT$() statement. For example... `x$=INPUT$(1,1)`. *Normally, it is more convenient to collect the value as a number rather than in string form and to do this you can use the ASC() function like this...* `x=ASC(INPUT$(1,1))`.

Using this collection statement in conjunction with a loop arrangement enables us to collect as much data as we want. To collect 50 MIDI bytes we might use something along the lines of...

```
FOR i = 1 to 50
x=ASC(INPUT$(1,1))
do something with the value in x
NEXT i
```

A simple loop which could continuously collect MIDI data would look like this:

```
forever=1
WHILE forever
x=ASC(INPUT$(1,1))
do something with the value in x
WEND
```

MIDI data arrives at the Amiga serial port as a series of byte (8-bit) values and on the face of it a program simply has to read a byte as it arrives, use it, and then loop back to collect another byte ad infinitum.

In practice this approach turns out to be a bit too simplistic because it disregards the fact that any given MIDI byte is likely to be related to either preceding and/or succeeding bytes.

In short any MIDI program which is going to do anything useful with the incoming data must be able to both recognise and distinguish between the various classes of possible incoming MIDI information, i.e. to recognise each byte in context.

How you do this in general depends on what your program is going to do, but this can mean recognising status and data bytes, being able to cope with real-time messages, and possibly even running status (implied status bytes) as well.

FAQ: Do you need PostScript?

With PostScript printers coming down in price, many people ask me if it worth the extra expense to buy one? The answer is a very subjective one. I think it is, if you want fast output. The PostScript printers I use enable me to print from a variety of programs like ProPage, Final Writer and Wordworth.

A page of text will print in seconds rather than minutes or hours. Even pages with bitmap images on it will print quicker than they would to a non-PostScript printer, although it has to be said that the bitmaps will slow down the print process. Use structured drawings though, and the print process will be much quicker than when using bitmaps. Almost as quick as text only.

The down side to PostScript is that if you want PostScript under £1,000, it will have to be a black and white laser. Colour lasers with PostScript are many thousands of pounds and inkjets with PostScript are just over £1,000.

The last point I want to make is that PostScript printers do not need a printer driver. As long as your application is PostScript compatible, in most cases, it will drive the PostScript printer. Try to stick to well known brands using proper Adobe PostScript. Some printers emulate PostScript and don't do it that well. *Larry*



PostScript printers are expensive. The Epson Colour Stylus II is a much cheaper alternative!

FAQ: When will PageStream 3 be finished?

Due to popular demand, here are some answers to a few questions posed to me in the last month:

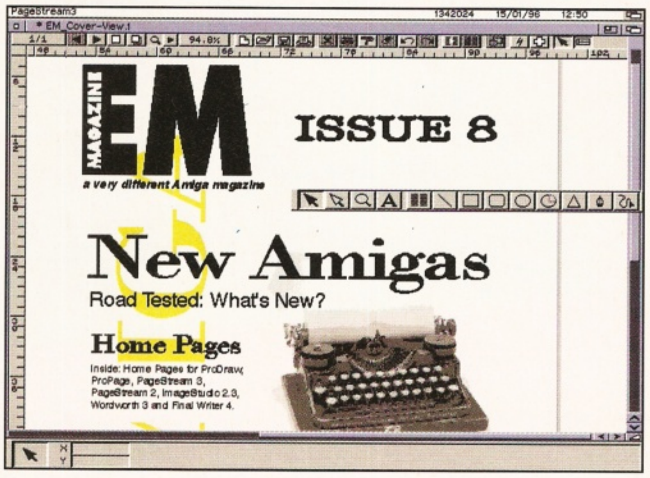
Looking at the user groups on Compuserve and the Internet, one of the most popular DTP questions is, when will PageStream 3 be finished? For those that saw the review in the January 1996 issue of Amiga Shopper, you will know I reviewed version 3.0h2 – although I found it to be OK for the work I do, many users are still finding it lacks the features they require for their work.

So the burning question is, when will it be finished? Version 3.0i should be released by the time you read this. However, estimates by Soft-Logik on the release of 3.1, are months rather than weeks. To give you an example of how difficult it is to predict these things, I was told in the latter part of last year that 3.0i would be released by November, then it was December, now it looks like being the end of January 1996.

Although many will blame Soft-Logik for this, you have to understand that programming a package like PageStream is no easy matter and you can't release what isn't finished. Some things just take time no matter how hard you try, especially when it is computer software.

Look at Windows95 and the delays it suffered – I'm sure MicroSoft's team is just a tad bigger than Soft-Logik's.

My guess is that by May 1996 we will have 3.1 and by the end of the year, a further upgrade to iron out any last minute bugs. It should be a really cracking program by then and I'm sure that after a few months everyone will forget the long wait. *Larry*



If you're waiting for PageStream 3 to be finished, it looks like being a few more months before version 3.1 is released.

For your application your first step, for example, would be to use the synth manual (or manufacturer supplied) information to check for well-formed Sysex message data. **Paul**

Massive MIDI problems

I am having problems running MIDI software on my Commodore A1500 (Workbench 1.3). I have Yamaha PRS300, PSS580 keyboards, an MU5 sound module and I'm running Bar & Pipes (Amiga Format version) and Music X 1.1. I have also used both an AMAS and a Datel MIDI interfaces. The problem is that when I play the keyboard through the sequencer package (the most successful one seems to be Bars & Pipes), I occasionally experience one of three faults:

1. The note does not play.
2. The note will play continuously.
3. A random sequence of notes are played.

I am fortunate to have several friends with Amigas and have tried an A1200 and an A500 using my set up. In both cases, even after prolonged use, I have experienced no problems.

Interestingly, when I used a friend's more modern A1500 I had the same sort of problems as with my own machine. I can play back stored MIDI files without problem which would suggest that the data is being corrupted in the input to the sequencer package (possibly in the serial interface).

I have tried changing the Amiga serial interface preferences and have also exchanged all the socketed chip set from the A500 to my machine but I still only experience problems with the A1500.

The only conclusion I can come to is that either the A1500 has something inherently wrong with its system board layout, or that maybe 1Mb of Chip RAM causes problems. In either case I cannot prove what is going wrong nor do anything to overcome the problem.

C Stanford
Royston, Herts

Altering the serial preferences settings will have no effect, all commercial sequencers set up the serial device directly and bypass all preference settings. I've never used an A1500, but officially I'm told there are no hardware design faults. Having said that I have in the past had a couple of letters from people who have experienced odd MIDI snags with software running on these machines.

The fact that all the Yamaha hardware works OK with other Amiga machines is significant and I think because of this you can assume that the problem does not lie with your MIDI equipment itself. The same goes for your MIDI interface since you have used two different units. Because the problem is intermittent I think you can also rule out any Amiga serial hardware faults.

It's difficult to diagnose MIDI faults at a distance but it seems as though both your sequencers are losing incoming MIDI data. Notes usually hang, i.e. play continuously, when a note-on message is received and echoed back but the corresponding note-off message gets lost. Similarly garbled notes can occur when only part of what you play is recorded. In short, I wonder whether you are experiencing a sort of 'MIDI clogging' problem due possibly to a combination of factors.

Bars & Pipes is a massive package and really needs to be used with a fast Amiga. I also know at least one user using the package professionally who has found an apparent bug in the program, connected with the speed at which it is able to output MIDI data whilst dealing with incoming tape synchronisation messages and so on.

It's possible that with a heavyweight package like Bars & Pipes, a slowish machine, coupled to a touch sensitive keyboard that can generate a lot of MIDI data might mean that your overall system might also be 'struggling'.

FAQ: Graphics: bitmap or structured?

In DTP, there are two types of graphics you can use; the bitmap format from paint programs like Deluxe Paint and Personal Paint, and structured drawings produced by applications such as Professional Draw.

The problem for many users is which format is best to use for DTP? As a fence sitter, I have to say, both. If the artwork is two-colour line art (black and white in other words), look at how big the image is on-screen and how big you need to print it on paper.

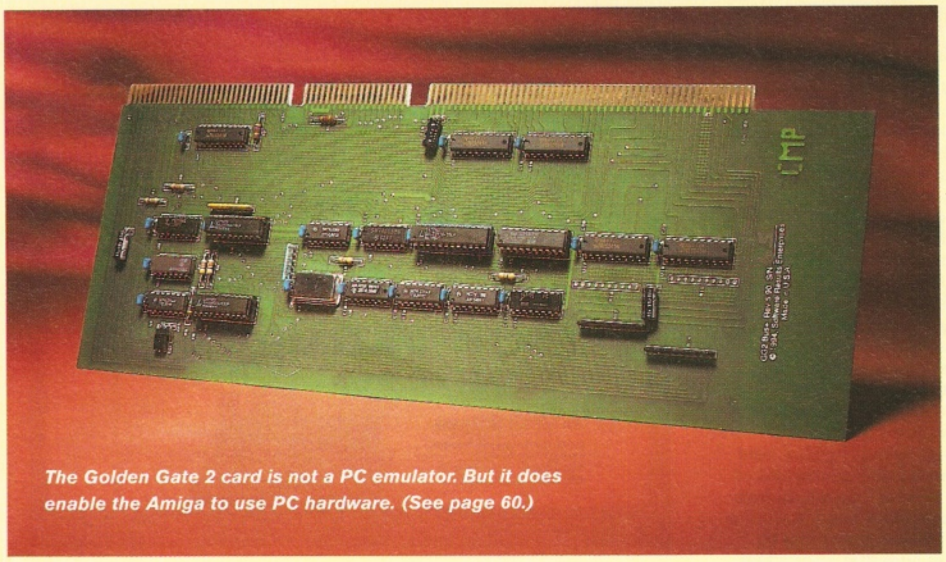
If the image is small – less than three inches on-screen – and you want to print it so it is at least two inches on your paper, then forget bitmap images and stick with structured drawings. Programs like ProDraw have a trace utility for converting simple bitmaps to structured drawings. Although this is not a perfect solution, it works.

If the bitmap image is full screen and you still only want it two inches big on paper, then you can reduce it down in your publishing program to the size required and it should print fine on most desktop printers.

In the main, I prefer using bitmap clipart, even two-colour material, because that's what I like to use. I just make sure that it's created very big, so I can scale it down later in ProPage. As for graphics like photographs, bitmaps are fine for this.

One of the main reasons I stick to bitmap photographs instead of going for clipart, is that I can use my camera to take the exact picture I want and be sure that it will print really well and say what I want to say. Desktop printers in combination with PostScript or printing enhancement packages on the Amiga, are getting better all the time. You can now produce quality, colour photographic images from packages like ProPage, Wordworth and Final Writer.

Photographs however, unlike two-colour bitmaps, do not need to be scaled down. It is possible to scan a 6x4 photograph at 100dpi and print it 6x4 and still not see any jaggies. This is because of the gradual shift in tones from one colour to another colour, hiding any jaggies. Many people make the mistake of scanning photographs at 300dpi to print on desktop printers. Not necessary. 100dpi is fine providing you don't intend enlarging it. The other proviso is that images with a lot of detail may need to be scanned at a slightly higher resolution. *Larry*



The Golden Gate 2 card is not a PC emulator. But it does enable the Amiga to use PC hardware. (See page 60.)

The same situation could occur with Music-X under such conditions.

You have done virtually everything that you should have done to check your system, but I think a few more experiments would be worthwhile. The object is to try and determine whether your MIDI data loss is only occurring when there is a lot of MIDI traffic on the line.

Try using just the PSS580, which will generate far less MIDI data than your touch-sensitive PSR300, and record some SIMPLE tracks. Look at the track data that gets recorded, and replay it. If I'm right you won't get lost notes etc., whilst the sequencers are having to do little work.

The idea then is to increase the complexity of what you are playing until snags arise – you may then be able to get a clue as to what has happened by looking at the MIDI information stored in the tracks.

I'm not surprised that MIDI file playback is OK because playing back stored MIDI information is far easier for a sequencer to do than recording incoming MIDI data.

Since you've got access to other Amigas another thing worth trying might be to link two machines, via their MIDI interfaces, and then (without using any quantisation) play a fairly complex MIDI file arrangement in real time into a sequencer running on the A1500 (use your playback machine to generate external clock messages). Normally this sort of real-time transfer using an external MIDI clock should produce a perfect copy and so, if you do have a MIDI clogging problem, this should be immediately apparent when you replay the recorded file. ***Paul***

C programming problem

I have been following the Amiga Shopper Dice C tutorials using the Compiler given away on the January 1994 Coverdisk and have the 2.04 Includes installed. I want to run my own test programs from the Workbench but do not know how to achieve this. The Dice docs indicate using wbmain() as an entry point instead of main(), but this causes a compiler error connected with _main. My compiled programs run OK from the Shell/CLI. How do I make them run from a Workbench icon?

Mr. Longstaff
Stourbridge, West Midlands

I think you are doing what a lot of people do when they first use Dice C. You're assuming that the wbmain() function should replace the conventional main() C entry point function when, in fact, you should use be using both functions. Listings 1 and 2 respectively (below) show a typical main() code fragment along with its Dice equivalent.

Notice incidentally that I've provided a couple of dummy arguments to main() in the Dice version – I assumed that these would be needed to keep the compiler happy, but in fact Dice didn't seem to care whether such arguments were provided or not.

```
int  main(int argc, char *argv[])
{
UBYTE error_number=NO_ERROR;
    if(!(g_resource_stack_p=CreateStack(void *)))
error_number=NO_STACK;
else  {
    /* attempt to allocate resources... */
    error_number=AllocateResource(DISPLAY_COUNT,
    display_list);
    if (error_number)
    {
    if (error_number==NO_GADTOOLS)
    DisplayAlert(RECOVERY_ALERT,alert_
    message_p,80);
    }
    else error_number=AmigaProg();
          while(!PopStack(g_resource_stack
          _p,g_function)) g_function();
    KillStack(g_resource_stack_p);
    }
    return(0);
} /* Logical end of program */
```

Listing 1: Example of a standard, i.e. conventional, C coded main() entry point. Under Dice this would not be Workbench runable!

```
int wbmain(struct WBStartup *wbs)
{
main(0,0);
}
int  main(int argc, char *argv[])
{
UBYTE error_number=NO_ERROR;
if(!(g_resource_stack_p=CreateStack(void *)))
error_number=NO_STACK;
else  {
    /* attempt to allocate resources... */
          error_number=AllocateResource
          (DISPLAY_COUNT,display_list);
    if (error_number)
    {
    if (error_number==NO_GADTOOLS)
          DisplayAlert(RECOVERY_ALERT,alert
          _message_p,80);
    }
    else error_number=AmigaProg();
          while(!PopStack(g_resource_stack
          _p,g_function)) g_function();
    KillStack(g_resource_stack_p);
    }
return(0);
} /* Logical end of program */
```

Listing 2: Equivalent Dice example with wbmain() function allowing code to run from either a Shell/CLI window or from the Workbench. ***Paul***

CD-R recording drive

In your recent Q&A column appearing in the January 1996 edition of Amiga Shopper (page 51), Mr. Derek Heasley had a question about CD-R recording drives.

Asimware Innovations currently produces MasterISO, a CD-R mastering package for the Amiga platform. This allows the user to control a CD-R drive and create custom CD-ROM and CD-Audio disks.

Paul Reeves
Asimware Innovations

If you want to know more about MasterISO, contact Asimware Innovations on ☎ 001 905 578 4916, or write to them at Asimware Innovations Inc., 600 Upper Wellington Street, Unit D, Hamilton, Ontario, Canada L9A 3P9. Or you could wait until next month because we will be reviewing MasterISO then. Sue

Double plus good?

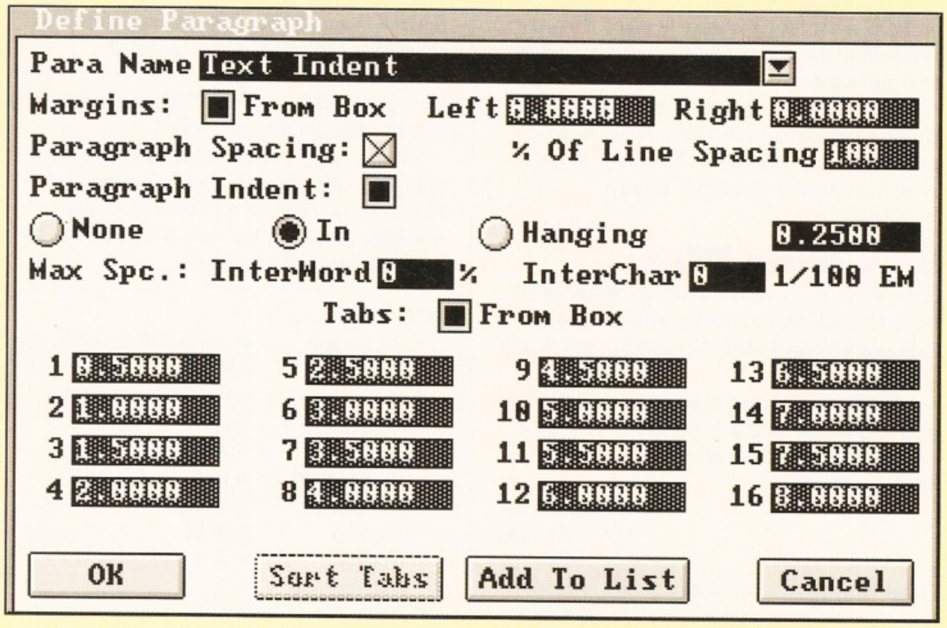
I have just bought the November issue of AS only to realise that the Coverdisks state a minimum requirement of Workbench 2.

I have an Amiga 500 with a 1Mb upgrade. Is it software I am lacking, or do I need a new Kickstart chip?

Also, is it possible to get a C++ compiler for the Amiga? I have also considered buying a PC emulator: would I still have enough memory to run C++ that way?

Martin Addison
Ruskington, Lincs

You need both software and hardware: a new Kickstart chip and a set of disks containing the new Workbench system software. The Kickstart ROM alone costs about £25 from Power Computing (☎ 01234 273000), but you will still need the new Workbench disks.



One of the best ways to control your indents is to use a Paragraph tag. Here we see an example of one for an indent for a quarter of an inch.

If you are serious about upgrading, don't waste time with Workbench 2, but go straight to version 3.01. The upgrade pack (ROM, disks and manuals) costs about £90 from Power Computing or Blittersoft (☎ 01908 261466).

The Amiga SAS/C development system included support for C++, although sadly this package is currently not being actively developed. Contact HiSoft (☎ 01525 718181) for more details. However, the good news is that there are plenty of rumours concerning a new C++ compiler from the same team who created the image rendering system Cinema 4D. Sadly, most compilers – especially those as complicated as C++ compilers require about 4Mb of memory and a hard disk.

Yes, it would be possible to use a PC emulator (the PC Task program) to emulate a PC and run a PC-based compiler. However, you will definitely need more memory and a hard drive. You will also find that on a bare 68000 system such as yours, compilation and execution speeds will be very poor.

If possible, forget about upgrading the A500 and look around for a second-hand A1200 with hard drive. You'll find it a much better system for programming. ***John***

Indent blues

I am a regular user of both PageSetter 3 and ProPage 4 and find these programs excellent.

However, I can find no way of reducing the ugly 0.5-inch paragraph indent to a more suitable value of say, 0.25-inch.

J Mitchell

Your problem is easily solved. In fact, there are a number of ways you can do this which I'll outline below using the program ProPage 4.

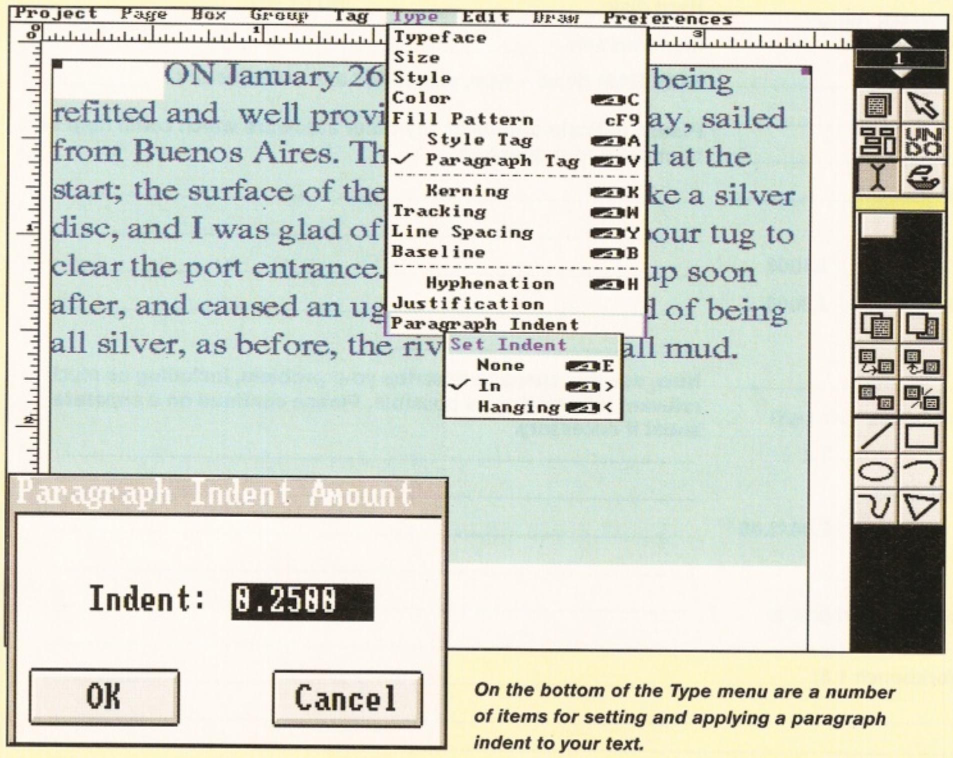
1. In ProPage, use your mouse to select a block of text. A short-cut is to press F4 to select all the text in the current box.

2. Choose from the Type menu, "Paragraph Indent" and its submenu, In.

3. The indent produced will be the default of half an inch. With the text still selected, go to the Type menu and choose the "Indent Set" sub menu from the "Paragraph Indent" menu item. Change it from 0.5000 to 0.2500. You should see a reduction in your Indent.

You can also set the indent by using the TAB key to push the first line across and then change the default first tab for the box or text, from half an inch, to a quarter of an inch.

Or you can use a paragraph tag. Create a new paragraph tag and go to the item on the panel called "Paragraph Indent". Make sure the button next to this item is selected and then click on a button for either None, In or Hanging. In this case, we want an indent that is In. So click on In and then the text gadget on the right will become unghosted. Enter the figure you want in there, which for a quarter of an inch, would be 0.2500. Highlight your text (F4) and apply the new paragraph tag to that text. ***Larry***



On the bottom of the Type menu are a number of items for setting and applying a paragraph indent to your text.

Radio (G)AGA

I noticed your address in a French monthly magazine Amiga Concept. They described you as a specialist in the Amiga technical domain, so I have a few questions for you.

I would like to know if it is possible to receive RTTY transmissions on the Amiga? I would like to exchange information between two Amigas by radio – have you ever heard of how this could be achieved?

Also, is it possible to equip my Amiga computer with AGA graphics?

Finally, is is preferable to buy a PC emulation card rather than a software system such as PC Task?

Monsieur Breut
Toulon, France

It is possible to receive RTTY (Radio Teletype), although I have yet to come across any Amiga-specific package. I have seen units which either decode and display RTTY themselves, or pass it on to a host computer via a standard RS232 serial output – in which case it should be possible to use it on the Amiga with a standard terminal emulation program.

To transmit data by radio you need a Packet Radio Modem as well as a transmitter and receiver. Data rates are normally around the 1,200 to 2,400 baud mark. Legislation on the use of domestic radio equipment for sending data may vary from country to country, and you should search out a local amateur radio magazine for more details.

No matter which model of non-AGA Amiga

you have, sadly it is not possible to add AGA graphics. However, if you have an Amiga with Zorro slots, you can add a graphics card and upgrade to Workbench 3.1 to enjoy many similar benefits (and a few improvements).

A hardware emulator works by providing a PC compatible processor to execute software, and will therefore always work faster than a software-based program such as PC Task. However, hardware emulators are very hard to find these days and are always more expensive. ***John***

Driving me mad

I recently bought a second, external disk drive for my A1200, but cannot for the life of me find a way to stop the thing "clicking" whenever there is no disk inserted.

I have had to either put up with this infuriating and continuous sound or unplug the drive. Any suggestions, or is it something I have to live with?

David O'Conner
Dinnington

This is very simple. There are in fact lots of programs, hacks actually, that will stop your drive clicking. These are either separate commands, such as NoClick or ShutUp, which you just call in your StartUp-Sequence as you do with any command, or part of a bigger utility, like YAK. These utilities can change many things about Workbench including the disk drive clicking. Obviously, they have to be run every time you boot, so you can only use them on DOS disks, but it is easy to place it in your WBStartup drawer so that it is executed every time you boot up.

Both types of programs have been included on our Coverdisks, with YAK last on AS54, or you can contact your local PD library, or get them from Aminet or a BBS. ***Dave***

Very cross DOS

In the networking feature in Amiga Shopper 56, John Kennedy mentioned that one can use a SyQuest with the help of CrossDOS. But he did not mention how!

The Golden Gate 2 card mentioned in the article, isn't that the card with a 486 processor on board? If it is, is the price Mr. Kennedy mentioned correct?

Geir Maurtvedt
Oslo, Norway

I used a SyQuest drive with my Amiga when running the ShapeShifter Apple Mac emulator: it was only a matter of connecting the drive to the Amiga's SCSI interface and it worked perfectly as a Mac drive.

Obviously, this meant the cartridge was formatted in Mac format, which is only of use when sharing it with other Macs (or other Amigas running Mac emulators). Part of the ShapeShifter distribution includes software which allows the Amiga to access any mounted Mac drives, so in this way the Amiga can read and write to the SyQuest.

However, it is also possible to use the SyQuest as a standard Amiga hard drive (the advantage being that it uses removable cartridges), and as I stated, it can also be used with CrossDOS so that cartridges can be shared between Amigas and PCs.

To do this, you need to create a mountlist entry to define the drive and its parameters. Here's an example for a 270Mb SyQuest cartridge lifted from the manual of PCTask, the software-based PC emulator.

```
PCC:
    FileSystem      = l:CrossDOSFileSystem
    Device          = <your scsi device>
    Unit            = <your unit number>
    Flags           = 0
    Surfaces        = 1
    blocksPerTrack  = 192
    LowCyl          = 0
    HighCyl         = 2729
    Buffers         = 5
    BufMemType      = 1
    StackSize       = 600
    Priority        = 5
    GlobVec         = -1
    DosType         = 0x4d534800
#
```

The GoldenGate 2 card does most definitely not contain a 486 processor: only the electronic circuitry necessary to decode address lines, provide timing signals and so on. Its sole purpose is to provide a method for the Amiga to use PC hardware such as modems and networking cards – it is not a PC emulator. The price quoted was correct. ***John*** ■

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☐ **A4000**

Approximate age of machine: ____________________

Kickstart version (displayed at the "insert Workbench" prompt)

☐ **1.2** ☐ **1.3** ☐ **2.x** ☐ **3.x**

Workbench revision (written on the Workbench disk)

☐ **1.2** ☐ **1.3** ☐ **1.3.2** ☐ **2.04/2.05**
☐ **2.1** ☐ **3.0**

PCB revision (if known). Do not take your machine apart just to look for this! ____________________

Total memory fitted (see AVAIL in Shell for Workbench 1.3) ______

Chip memory available (see AVAIL in Shell) ____________________

Agnus chip (if known) ____________________

Extra drive #1 (3.5in/5.25in) as DF : Manufacturer ____________________

Extra drive #2 (3.5in/5.25in) as DF : Manufacturer ____________________

Hard disk: ____________________**Mb as DH**____________________**:**

Manufacturer ____________________

Extra RAM fitted – type, size in Mb and manufacturer ____________________

Please indicate details of any other hardware which could help us to answer your question:

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Now, use this space to describe your problem, including as much relevant information as possible. Please continue on a separate sheet if necessary.

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● **DICE 3.01** original disks and manual, only a few weeks old, £80. Phone Dave ☎ 0161 337 9601.

● **68040 accelerator** for A2000, 28MHz, 4Mb RAM, £300 ono; Picasso 24-bit graphics card £150; GVP HC8 SCSI card for A2000 and A4000, 0Mb RAM, 120Mb disk £100. Phone ☎ 01454 326548.

● **A1200,** GVP 40MHz 68030/68882, 8Mb Fast RAM, 428Mb HD, Zappo CD-ROM, Vidi 24RT, mono hand scanner, double external floppy, CM8833 monitor, boxed, Imagine 3, Vista Pro, £1,100. Phone Mark ☎ 01736 754897, evenings.

● **Blizzard 1220/4.** Turbo memory board, originally £229, sell for £100. ☎ 01234 271022, ask for Matthew after 6pm.

● **Microbotics equipment.** VXL030 accelerator – A500, A2000 – boxed, £110; 8-up RAM card A2000, 2Mb, £60; Hardframe SCSI card + 40Mb HD £100. All include software. Offers welcome. Phone Paul on ☎ 01252 319479.

● **CD[32] with serial** connection kit, mouse, magazine, CDs, Aminet 8, Zoom, Meeting Pearls, Grolier, etc. £165, P&P included. Write to: Assim Mahmood, 14 Curven Edge, Helmshore, Rossendale, Lancashire BB4 4LP.

● **Real 3D v2.0** for sale. Original disks, boxed with manual and dongle. £95. ☎ 01484 864184.

● **A1200 Viper** Mk1 68030 28MHz accelerator with 2Mb Fast RAM and battery-backed clock. £135, P&P included. S.A.E. to: Assim Mahmood, 14 Curven Edge, Helmshore, Rossendale, Lancashire BB4 4LP.

● **RAM 4Mb,** 72-pin SIMMS, £74; 1Mb 30-pin SIMMS, £22, plus P&P. ☎ 01928 714651, phone after 6pm, ask for Gordon.

● **Microway** flicker fixer for Big Box Amigas, compatible with manual and software, £75, incl P&P. Call George ☎ 01573 224632 any time.

● **A500,** 4Mb RAM, 60Mb GVP hard drive, EWB 2.0, Cumana external

floppy, original boxes, mouse and joystick, £275 ono. Buyer collects. Phone ☎ 01252 314439, before 7pm.

● **Amiga games:** Ruff And Tumble, Theme Park, Second Samurai, Monopoly, Mortal Kombat, Arabian Knights, Night Shift, £5 each. All originals, in mint condition. Phone ☎ 0191 273 7322.

● **Amiga A500 Plus**, Cartoon Classics, 100Mb reference HD, lots of games and serious software, plus external HD, floppy drive, hand scanner, £275 ono. (Worthing) ☎ 01903 213397.

● **ProGrab 24RT** digitiser, as new, produces great pictures from video. Cost £130 new, will accept £80. Graham (Warwickshire) ☎ 01926 425881 .

● **DICE 3.01** complete package £50. AMOS Professional £25. AMOS Professional Compiler £20. Blitz BASIC 2.1 (latest version), includes Blitz user magazines 1 to 8, £25. (Edinburgh) ☎ 0131 668 3960.

WANTED

● **Copy of** GVP's G-Force 030 combo manual for A2000. Will pay £5 for trouble. ☎ 01703 403714.

● **Wanted: penpal** A1200 owners. I'm serving in Bosnia, need penpals. Write letter on Shell Ed and I will reply. LCPL Long, Officer's Mess, 2LI Vitez School, Op. Grapple 7, BFPO 547.

● **Amiga 4000/030,** must be in mint condition. Also multisync monitor. ☎ 01653 695223, ask for Steve, evenings. Cash waiting.

● Wanted: Imagine 2 – official product – reasonable offers considered. Or Imagine 2 manual, approx. £10. Phone Joe ☎ 0114 255 0009.

● **Amiga 1200,** 6Mb RAM, external drive, 40MHz accelerator, 200Mb hard drive, two mice, two joysticks, enhanced power supply, software. £400. Call ☎ 01752 364189.

● **Deluxe Music** Construction Set 2. I will pay £35 for complete package, or between £25-£30 if damaged or extensively modified. Contact: Lee Butler, 137 Howard Road, Cambridge CB5 8QT.

● **Microbotics VXL32** RAM for VXL030, any size. V-Lab Y/C for my Picasso 2Mb boxed. Buyer for A3640 040 card for A3/4000 £400 ono. Phone Paul ☎ 01252 319479.

● **WB 2.1 wanted.** I will swap 30 PD disks for it. Must be original. Also: printer job required (printing a few letterheads from IFF). Small job only. ☎ 0171 701 8546.

● **AMOS contacts** wanted for programming and swapping games/ utilities. Please write to Will, 52 Saint Oswalds Road, Fulford, York YO1 4PF.

PERSONAL

● **High quality** scanning service in full 24-bit colour at resolutions up to 4,800dpi in either A4 or up to A3. Yes! Full A3 in colour. Call ☎ 01440 62310 for details.

● **Free Amiga** user group for beginners and experienced users alike. For latest diskmag, send a blank disk and S.A.E. to: Pro-Soft, P.O. Box CR53, Leeds LS7 1XJ.

FANZINES/BBSs

● **New Amiga** diskmag. Only £2 for two disks on AMOS, Imagine, PD and lots more. Contact me via post for information: Jono, 25 Denness Place, Llandudno, Gwynedd, Wales LL30 2UX.

● **Mogsy's BBS.** Contact Anthony Morris on ☎ 01772 496590. Amiga only! Over 1,000 files on-line and CDs to choose from! Speeds 2400 to 28,800. 24 hours. Don't delay and call today!

● **Visions** – a new SF/fantasy/horror fanzine needs fiction and artwork for issue one. An S.A.E. gets you further details: S. Kennedy, 41 Larwood, Worksop, Notts. S81 0HH. All genres considered.

● **Black Magic BBS.** Online midnight till breakfast. 14400, full graphic (IFF) adventure game with sound. Online soon! It's a new BBS so spread the word. Call ☎ 01482 473458.

● **Cyber Power BBS.** ☎ 0144 322 6418, 10pm to 7am. Total Amiga nuts, Aminet access, all the latest news as it happens, excellent ratios, Kewl SysOp. Cyber Power's official support BBS.

● **The Domain AGA**. Amiga-only PD newsletter that will review your PD software for free. Available from: 6 Saxon Court, Kingsway Gardens, Andover, Hants. SP10 4BU. Send SAE for more details.

● **Beyond Sanit-E** diskmag requires articles on any subjects. Use IFF, ASCII, even paper! We don't mind! Contact: Zylax/PTK, Brookside Cottage, Moorby, Boston, Lincs. PE22 7PN. All disks returned with latest issue on.

● **Echoes BBS**. Fido, Aminet, local mail files CD-ROM. Always the latest Aminet CD online. Pointing, Xenolink, Pro Software, 24 hours. Friendly SysOp. A Camberley-based Amiga BBS. ☎ 01276 62099.

● **Power Plant BBS**, CD-ROMs online fee downloads, loads of file areas, speed now at 33,600. Dial ☎ 01229 431590 for instant access.

● **Digital intensity**, Amiga disk-magazine. Covers topics like: PD, commercial software, printers, Amiga hardware, etc. For more information send an S.A.E. to: Simon Denvir, 40 Old Cavehill Road, Belfast BT15 5GT, Northern Ireland.

● **Mayhem** (ex-Sliver) now open. 5.5GD Amiga files on line. 7pm-6am, 24 hours at weekends. New users to Comms welcome. All speeds up to 14.4k running Xendlink, helpful SysOp. ☎ 01502 714663.

● **Impact BBS**, contact Steven Yapp on ☎ 01584 876365 on week days and 24 hours at weekends.

● **Draught Flow BBS**, nine CD-ROMs on-line including latest Aminet, Goldfish, Goldfish 2, Hottest 4, Hottest 5, GIFs Galore, etc. Not ratios. Free downloads at 28,800 and free Internet mail access on ☎ 01707 328484.

● **Speeds** to 14,400 all Amiga files – Fidonet and Subspace mail. Contact Steven Yapp on ☎ 01584 876365, 6pm week days and 24hrs weekends.

● **Professor X's BBS.** 10pm to 8am ☎ 0171 603 1872 300 to 14,400bps. Over 650 newish files. Many mail areas, and on-line games. SysOp Richard Hart. Instant access!

● **Amiga Buzz BBs** ☎ 01924 491461,24-hours. V Everything. Amiga only. Kewl system CD online soon. Call now!

● **Parliament Of Rooks BBS**. 100 per cent Amiga, 100 per cent FREE. 24 hours, 1.75Gb file space. Friendly and helpful SysOp. Instant access ☎ 0181 783 0704.

● **No Limits BBS** ☎ 01293 413668. 24-hours, 1.2Gb, great new BBS! Running Xenolink. Check out what a 15-year-old can do. Dozens of networks, including Barnet. Pros and new users welcome.

● **Magic Mushrooms BBS**, online 24-hours, over 7Gb available. ☎ 01889 579854. Free access to CD-ROM, new users most welcome. Helpful SysOp, all speeds up to 28.8K. The Midlands' finest BBS.

● **Big Hard One BBS**. Amiga only, 3.5Gb online. PCs not welcome. Call ☎ 01162 661610. Node 2 (remote) call ☎ 01530 260160. Call 8 till 8 every night.

● **Robins Revenge** BBS. Luton based. Online from 10pm to midnight every day on ☎ 01582 423430.

● **Scorpio BBS.** ☎ 0181 657 4913. 6pm-midnight. Over 50 Amiga CDs, many available immediately. Files direct from the Internet at no cost.

● **BBS. Enter the Z zone.** The little board with big ideas. Seven CD-ROMs online, no ratios. ☎ 01424 421403, 6pm weekdays and 24 hours weekends. Thousands of Amiga files. ■

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Music, if you please maestro

John Kennedy *introduces the first part of a new series in which he and Darren Irvine will explore the Amiga's ability to make and control sound.*

What was once the domain of the AtariST looks to have been passed on to the PC: the accolade of Music Computer. Yet, for many reasons the Amiga is a considerably more powerful and useful machine, both for amateur and professional musicians. No matter what level of musical skill you possess, the Amiga is the ideal machine to help you make the most of it.

From the outset, the Amiga was designed with sound at the core. The internal chipset includes custom hardware for creating four voices of 8-bit digitised sounds. Rather than contain a limited synthesiser like those available at the time, the Amiga instead stores captured versions of real sounds.

With an Amiga and no extra hardware, you can compose and replay music consisting of percussion, bass, pianos, brass, woodwind: even vocals.

Native Amiga sounds

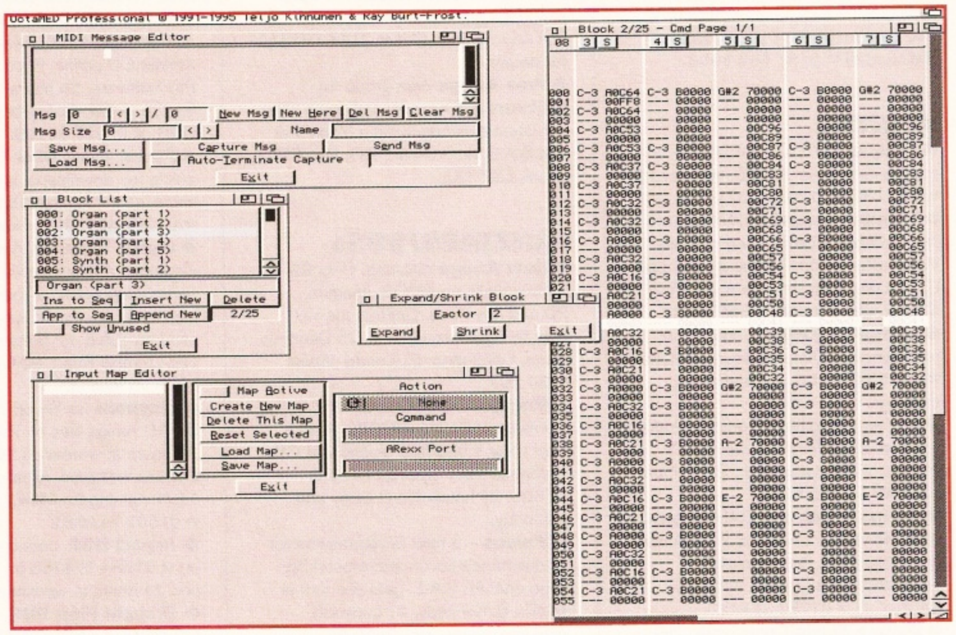
Making music on the Amiga isn't going to cost you an arm and a leg either: in fact, you can do it for nothing if you have the right software. You'll need a Tracker program, which will use the Amiga's built-in audio capabilities to create four-track tunes.

Don't think that four tracks of 8-bit audio won't achieve very much either: listen to some of the latest MOD files and you'll be very impressed indeed.

Using a Tracker is a great way to get started. There are many instrument samples available: you can get disks full of them from Public Domain libraries or download them from the Internet or bulletin boards.

You can even "borrow" the samples contained in existing songs. If you buy a sampling cartridge you can make your own samples very easily, and incorporate them into your own compositions.

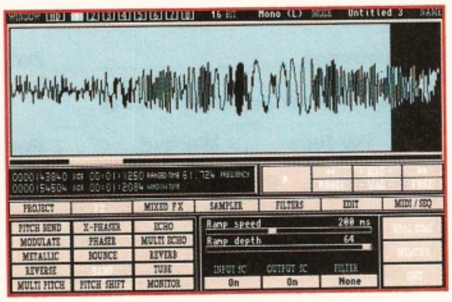
One of the most interesting Amiga programs we hope to see in 1996 is Sound Studio, from the programmer of OctaMED. Sound Studio promises to be a 32-channel sound environment which will allow samples to be recorded to, and play from, hard disk in up to 16-bit quality.



OctaMED version 6 is the commercial version of the popular sound tracker. It includes many features, such as MIDI compatibility and sample editing features. It can even squeeze eight samples at once out of the Amiga hardware.



Teijo Kinnenun is the author of OctaMED, one of the most advanced and popular music tracker programs of all time. OctaMED is available in a freely distributable form as well as a commercial product.



HiSoft's Aura allows 16-bit stereo sampling at CD quality. It can also be used from OctaMED for amazing results.

Jargon buster

MIDI: (Music Instrument Digital Interface) A connection standard that allows instruments to be linked to each other and to computers.

Sample: A sample is a file which contains data which makes a sound when sent to suitable hardware. You can create a sample by passing a sound though an "analogue to digital converter": a device normally known as a sampler.

Sequencer: A computer program (or very old hardware) which can store notes and replay them. The notes can be edited, timing adjusted and complex songs constructed.

Tracker: A program commonly used on the Amiga for creating music. It's called a Tracker because there are usually four (or more) tracks of notes which scroll up the screen, triggering samples.

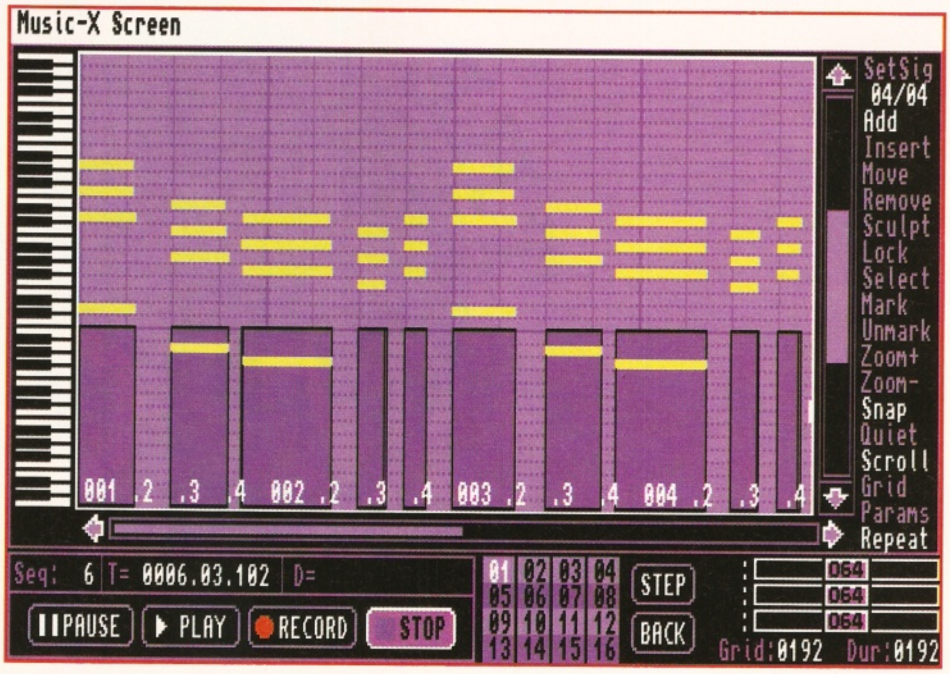
Aural Synthetica

To complement our new music tutorial we have included a demo of the excellent music program, Aural Synthetica, on our Coverdisks this month.

Aural Synthetica is a very powerful sound creation program and our demo gives you the opportunity to try out all the amazing features of the full program. The only limitation of the demo is that the save function has been disabled.

You will find a brief outline of this program's features in our Coverdisk instructions on page 10.

If you then decide that you want to buy the full version of Aural Synthetica, we have arranged a special, money off deal for you, exclusive to readers of Amiga Shopper. All you have to do is fill in the order form and post it to Seasoft Computing to save £5!



Not only is Music-X 2 incredibly cheap, but it's probably the best sequencing software available on the Amiga. Fast, powerful and efficient it's good enough for professional use. Darren and John use it too.

Advanced sampling

Although it will take you a long time to exploit the standard audio capabilities of the Amiga, it is possible to go beyond the 8-bit barrier. HiSoft's Aura (☎ 01525 718181) is a piece of hardware which connects to the PCMCIA slot and allows sounds to be captured in 16-bit, which is the same sort of quality used to record CDs.

Aura can be used to create and replay samples either using its own software or controlled via later versions of OctaMED. This means that an A1200 can create sounds of the same quality as professional samplers costing £1,000 or more.

MIDI and sequencing

However, it is when you start to reach beyond the standard sound capabilities that you realise what an excellent machine the Amiga is.

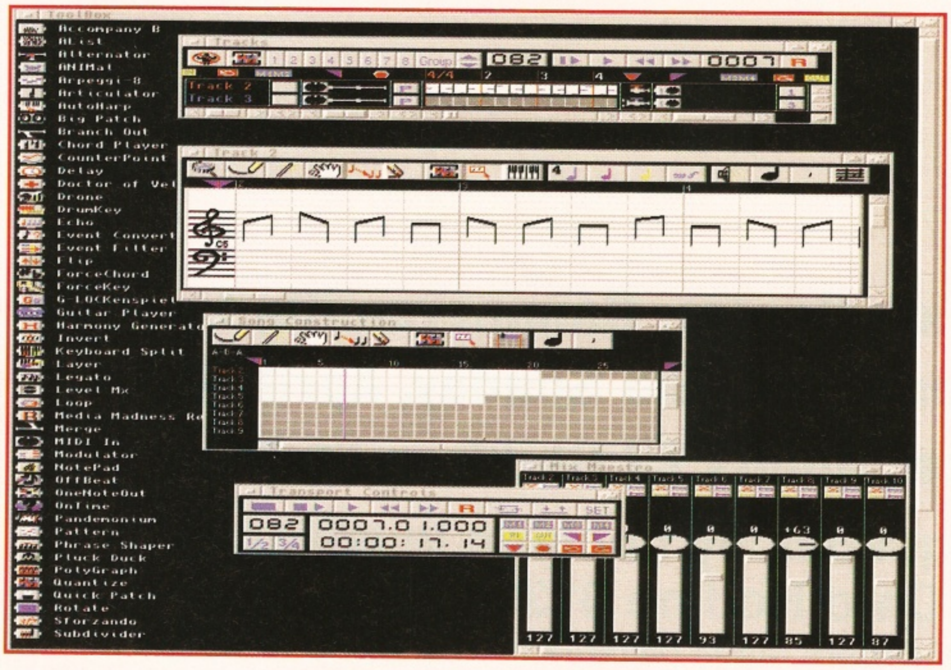
With a relatively inexpensive piece of hardware called a MIDI Interface, the Amiga can be linked to studio quality instruments. Keyboards, synthesiser modules, drum machines and samplers: the Amiga can communicate with them all.

> "From the outset, the Amiga was **designed** with sound at the core."

With a sequencing package such as Music-X or Bars & Pipes, the Amiga can control all the instruments in real time. Imagine playing a tune on a keyboard, and capturing it in the Amiga's memory for editing. This is what MIDI is all about, and with it you can re-create your own studio at home.

MIDI equipment isn't as expensive as you might think, and with a small external module you can provide your Amiga with drum, string, guitar, piano and organ sounds which are amazingly realistic.

An Amiga can control many different pieces of MIDI kit at once, which means you can either buy an all-in-one module which includes everything in one box, or build up your studio piece by piece with instruments dedicated to particular functions.



Bars & Pipes combines excellent MIDI sequencing features with the ability to control extra hardware, for true multimedia performances.

Coming soon

Over the next few months, Darren Irvine and I will present you with tutorials covering every aspect of making music on the Amiga, from using trackers to dedicated MIDI equipment. We will demonstrate how to build up songs, and describe some useful techniques and tricks for making the most of your equipment. We'll even cover mixing and recording so you can threaten your friends with your productions.

If there is anything that you would like to see covered in this tutorial, write in to the Editor and we may be able to extend the series. There are six tutorials planned at the moment, but if you want more, let us know.

So until next month, get those finger muscles flexing and warm up your speakers: Amiga music is coming! ■

Network business

Darren Irvine *takes a look at the increasingly popular trend of doing business on the Net.*

Life without plastic



One of my favourite sites – Sainsbury's Wine Direct. You can peruse from their extensive booze selection, and – if you have a credit card – have a case of it delivered right to your door.

So what happens if you don't actually have, or want to have, a credit card? Will you be trodden underfoot in the great stampede towards higher and higher credit limits? Well, for the time being no, as long as you do have some means of paying for goods remotely – a cheque book will do. Basically, the situation arrives at making a compromise between the new technology and the old.

Yes, you can use the Web to do your browsing around the shops, but when it comes to buying something, you'll have to get your chequebook out and resort to posting your order by snailmail. Of course, this method generally also restricts you to shops and services in the UK that accept orders by post – but you can always use E-mail in the first instance to see if this is acceptable.

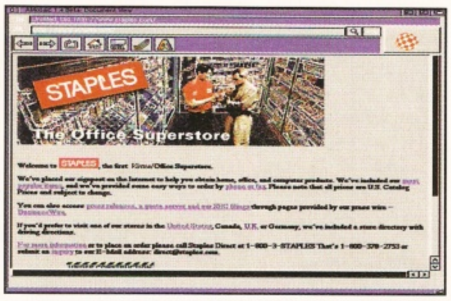
Much has been said about the way in which the Internet is going to revolutionise the way in which we do business "in the near future". Of course, we have been waiting quite a while for this "near future", but at least now it is feasible to begin using the Internet for buying and selling. This is largely due to the huge popularity of the World Wide Web. Thousands of businesses have created home pages, and if you have a home page, well – why not sell something on it?

Of course, buying and selling involving computer networks has been taking place for quite some time – albeit in the form of secondhand goods. There have been Usenet newsgroups dealing with stuff "for sale" for years now, and Fidonet also has a long tradition of being used for such trading.

Why the Web?

As I've said – the main reason that Internet trading has become feasible is the Web. This is because it is amazingly cost effective to advertise things in this way, especially compared to the costs of traditional advertising mediums such as TV and national billboard campaigns.

Rather than forcing your details on to millions of irritated Usenet newsgroup readers (a process known as spamming), as has been done in the past, a Web page is something users will actively seek out if they are interested in your product (this is especially true of specialised products). If you are in the business of selling, say, snowboarding equipment, you can be sure that snowboarders on the Net will find your pages.



Staples was one of the first large chain stores to offer services to UK customers directly. Find it at http://www.staples.com.

What can you buy?

Well, this time last year I'd have rattled off a few dusty old examples – things that have been around for years – such as the ubiquitous Interflora. Even the dubious online services of such magazines as Playboy and Penthouse are old hat now. In fact, the answer to this question is, "just about anything you can think of."



If you're an antiques buff, but can't be bothered poking around dusty old shops, try Pavilion Antiques at http://www.micromedia.co.uk/pavil.

This is because the world, his aunt and her pekinese are now on the Net – everyone from Aardvark Supplies to Zoological Equipment Co. And of course, although this influx of commercial users on to the Internet is sneered at by many veteran users, it is good news for the rest of us. Rather than reel out a huge list of examples of online shops or services, I've included a few in the form of screenshots – these reflect only a tiny fragment of what is actually available.

How does it work?

In general, the principle of online shopping using the Web is extremely simple. First, you search out the sort of shop that is of interest to you (or as is more usual, come across something really obscure by accident that sells things that you absolutely don't need, but absolutely MUST have). You can use Internet list services such as Yahoo and Webcrawler to search out the things that you are interested in.

The next step is to peruse the online catalogue to see if the shop has anything you want or need – as with "real" shopping, it can pay to look around a number of similar online shops to compare prices.

Trading and Internet security

When someone asks for your credit card details, the last thing you want is a dubious third party looking over your shoulder as it were and making a note of your details. Although this is extremely unlikely to happen, given the sheer volume of traffic on the Net, the sensible course of action is to encrypt your data.

Unfortunately for Amiga users, the trend on the Net currently seems to be towards using the Netscape Secure Server system. This involves a secure linked formed between specialised server software and Netscape's own Web browser running on either a PC or a Mac.

This system is actually rather nice, and extremely user friendly whilst at the same time retaining a very high level of security. It's just a pity that it isn't available on the Amiga. There has been a lot of hot air talked on Usenet about how Netscape for the Amiga will be available "real soon now" or "as soon as the Power Amigas come out", but the only way you can use Netscape at the moment, and probably for quite some time, is to run the Mac version using the ShapeShifter Mac emulator.

However, there are still some alternatives. Many sites will accept orders by PGP encrypted E-mail. In this case, you just look around the Web until you see something that you want to buy, and then you place an order by E-mail, including the details of what you want to buy, along with your address and credit card details.

Your E-mail can be encoded by you before sending, using the vendor's public PGP key. This method is every bit as safe, if not safer, than using a Secure Server, but is considerably more tedious.

Finally, you order the goods – either directly by submitting your credit card details via a Web form, or by contacting the vendor in another way.

What's the catch?

In general, there are two main problems for Amiga users in the UK. The first is that by far the majority of online shops and services are in America, and not all of them will accept overseas orders (those that do sometimes charge hideous export charges). However, this is becoming less of a problem as more and more UK shops get in on the act.

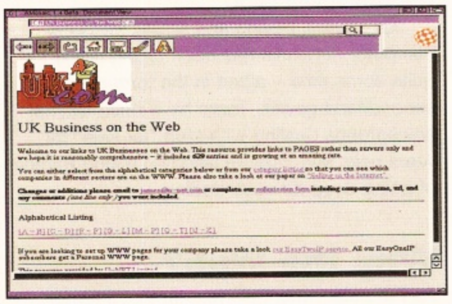
The other problem is that of the security issues involved in sending sensitive data such as credit card details across the Net – although the risk of someone hacking into the information is small, it does exist. See the boxout above.

Where will it all end?

Many people have said all-encompassing and frankly unrealistic things such as, "the Internet will make High Street shopping obsolete within 10 years", and "in the near future, all shopping will be done from the comfort of your armchair". The problem with this sort of view is that most people like to get out around shops and see for themselves the goods that they are buying.

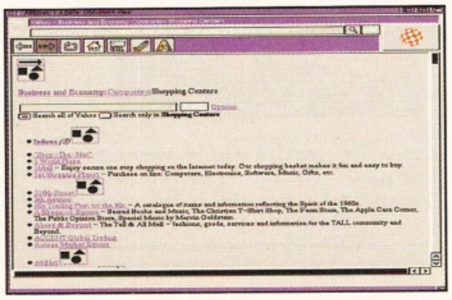
What the Internet has done however, is to make a much wider range of goods available to all its users – people used to only having the usual High Street shops available, or people living in rural areas with restricted shopping availability, can now access the same eclectic range of goods and services as someone living in New York, Paris or Tokyo.

The Web has opened up shopping to the users of the Internet in much the same way as



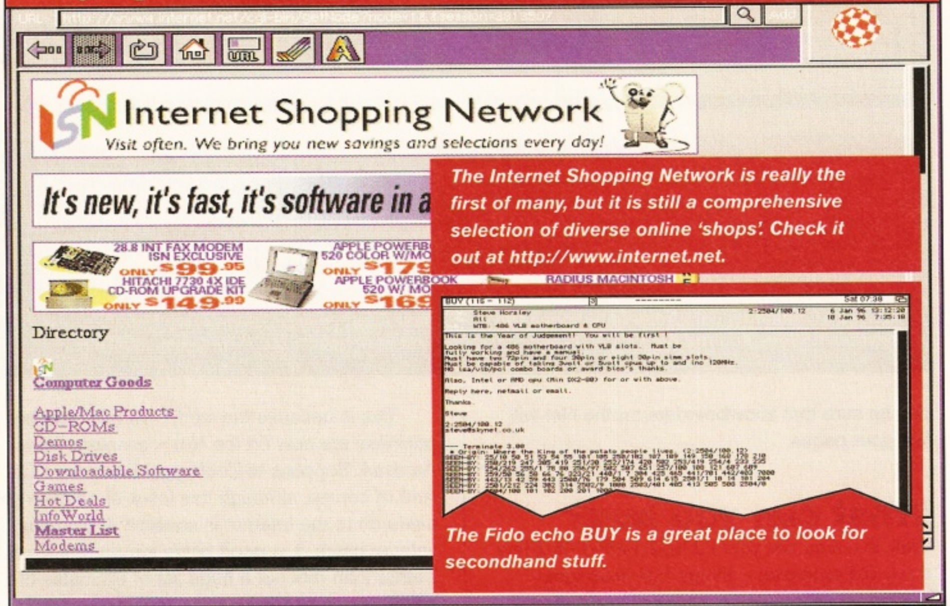
For a specific list of some UK businesses on the Net, check out the UKCOM pages at http:/www.u-net.com/ukcom.

the original Sears catalogue did to the pioneers of the Wild West. Perhaps this is, in fact, the best analogy – rather than replacing High Street shops, online shopping via the Internet is actually a high-tech replacement for home-shopping catalogues. I can imagine that, unless they want to be quickly superseded, we will soon be seeing the likes of Grattans and Freemans on the Net, taking orders online, instead of over the phone. ■



If you can't find what you want, try the Yahoo business section at http://www.yahoo.com.

Buying and selling on Usenet and Fidonet



The Internet Shopping Network is really the first of many, but it is still a comprehensive selection of diverse online 'shops'. Check it out at http://www.internet.net.

The Fido echo BUY is a great place to look for secondhand stuff.

As usual, although the World Wide Web is the feature of the Internet that attracts the most attention, there are other aspects of being online that can be beneficial to people buying and selling.

Usenet has a huge range of "for sale" type newsgroups under the "misc" grouping. The majority of these are computer-related, but there are some general groups too. However, the same problems occur here as with many Web sites – the majority of people posting the ads are in America, and actually getting hold of what they are selling might be a problem (unless you have friends or relations living in the States). However, most countries have at least one local ads newsgroup, and the UK is no exception – the group concerned is "uk.forsale". Some of the misc groups that may be of interest are:

misc.forsale.computers.memory
misc.forsale.computers.modems
misc.forsale.computers.monitors
misc.forsale.computers.net-hardware
misc.forsale.computers.other.misc
misc.forsale.computers.other.software
misc.forsale.computers.other.hardware
misc.forsale.computers.printers
misc.forsale.computers.storage
misc.forsale.computers.workstation
misc.forsale.non-computer

On Fidonet, the choice is somewhat more limited, and in general the only widely carried echo involved is the appropriately-named BUY. There is also a NIBUY specifically for Northern Ireland Fido people, and many Fido nodes also carry the Usenet group "uk.forsale".

In addition to these Usenet and Fido groups, if you're a CompuServe user (unlikely, given their ambivalence towards the Amiga) you'll know that they also have a large number of forums for buying and selling – both new and secondhand goods.

Now Amiga Shopper is on-line



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To advertise on FutureNet, E-mail **Simon Richardson** at srichardson@futurenet.co.uk or call 01225 442244.

A mine of AMOS information

*If you want to program in AMOS but can't find any information about this excellent language, or even other, like-minded people to swap problems and ideas with, **Steve Bye** is here to help...*

For a great source of ideas, discussion and problem solving, the AMOS mailing list on the Aminet is excellent. For example, I have listed below the solution to a problem that a lot of MED users have been complaining about – how to save a MED module bank inside your AMOS code. The following is Petri Hakkinen's solution.

MED module solution

This simple procedure relocates a MED module so that it can be saved with an AMOS program. However, at the beginning of your program, before you play the module, you have to remember to call this procedure.

```
Procedure RELOC_MED[BNK]
   ' BNK - bank #
   '
   ' Open medplayer.library, version 2 or newer
   Lib Open 1,"medplayer.library",2
   ' the address of the med module to a0
   Areg(0)=Start(BNK)
   ' call RelocModule from medplayer.library
    L=Lib Call(1,-102)
   ' close library
   Lib Close 1
End Proc
```

This is a good example of the useful information that can be gleaned from the AMOS list.

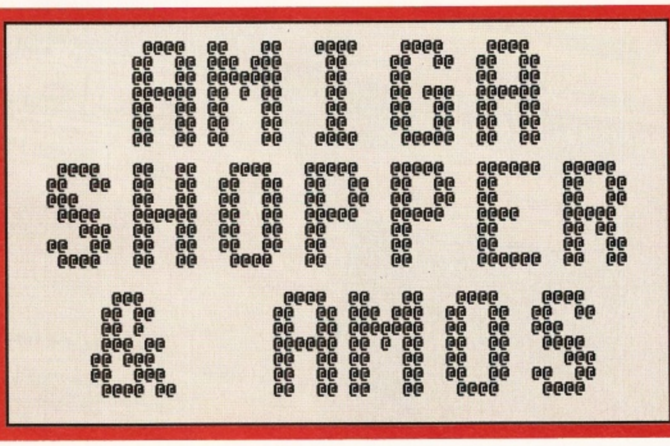
Another example of problem solving is this question from a chap called JW: "I want to write a utility to run under DOpus, which means it needs to be a Shell or CLI executable. I need to be able to pass arguments to the program at StartUp. Here's the problem: I read that 1.36 Compiler will NOT make CLI executables. What can I do, if anything?"

JW received this reply: "There's hardly any difference between WB and CLI executables, except that the WB ones have an icon created and the CLIs not. (Moreover, there's a bug in the AP Compiler which always makes a cli executable 'run' type, so it will unhook itself no matter what the switch has been set to.) So, just create a Workbench executable and delete the icon. You can read the command line using the AMOS '=Command Line$' instruction (but do it early in the program because Francois has located this string buffer somewhere in the gfx-buffers). However, there are no automatic argument parsing routines in AMOS for templates like 'FROM/A,TO/A,QUIET/S' etc."

As you can see, being on the AMOS mailing list has a lot of benefits. Any serious AMOS user – beginner or expert – should be on it to either learn/share or both. What I found refreshing is that total beginners are not 'flamed', they are helped, no matter how simple the answer to their questions may appear. It's all coordinated by a clever chap called Andy Church and he deserves thanks and recognition for his devotion to AMOS over the years.

If you have access to the Internet you can subscribe to the AMOS list by sending an E-mail to amos-request@access.digex.net, including the word 'subscribe' in the text. There is also a website, maintained by Andy Church, at http://mmm.mbhs.edu/~achurch/amos/.

Alternatively, there's an AMOS discussion echo on Fidonet that you can access from any participating bulletin board. There are a couple of BBSs that support free E-mail, which means you can get on the AMOS list without Internet access, which is what I do through a very good BBS called Digital Candy on ☎ 0191 232 5527. Digital Candy is a 24-hour board with five nodes so you rarely have trouble connecting.



Text Logo Maker creates logos with ASCII characters for use in doc files, etc.

Hard disk installable programs

Most users want to install software on to their hard drives. Some people won't even look at un-installable software. And, as CD-ROMs become more commonplace, there is a good chance your program may end up on a CD. Some CD producers like to have the software runnable directly from the CD. Therefore, it's worth making your program easy to install and run from CD if you want people to see your work.

So how do you know if your program will run from a CD? As a general rule, if it runs from Workbench it should run from most CD interfaces. You may think this will give you problems, but not so. It is quite easy to make your program run Workbench if you keep to the few simple guidelines I have compiled, with the help of Chris Wiles from Active Software:

1. Don't use file i/o in the form of calling devices, i.e. Load "df0:pic.Iff" or whatever, call the disk by name. Load "DisksName:file" for example and not Load "DF0:file".
2. It would help if your first screen is not in lo-res (320x200 or 320x256) because this seems to cause screen corruption when running from a hi-res Workbench screen.
3. Make sure you put a "Quit" option in your program. This means that most programs, when run from the CD interface, will return the user back to the menu it was launched from.
4. Use a standard AmigaDOS disk, no custom formats.

In most cases, to install your program to hard drive, all that will be needed is for the user to drag your disk's icon to their hard drive partition. If your program uses any fonts or libraries not

contained on Workbench then you will have to write a simple Installer script to copy the files across to the user's hard drive.

There are probably a few specialised programs this method won't work with, but as a general rule it will work – you may be thanked for it, one day.

Roll your own logos

The following is a neat piece of code written by Andrew Campbell. Andrew is responsible for the original Black Dawn series of games. He also writes articles for just about every PD diskzine.

His routine is called Text-Logo Maker. It creates logos with ASCII characters for use in doc files and so on. Just insert the text you want converted in the 'Print' statements and a few seconds later you can save out an ASCII file of your logo.

At the moment the program only supports the use of one character per logo – there's a challenge for you. I'm sure you can think of other ways in which the program could be improved.

Text-Logo Maker

By Andrew Campbell

```
'
'Reserve enough variable space
Set Buffer 35
'And dimension arrays
Dim T(60,30),_TEXT$(30)

'Open screen 1 and print the text to be converted
on it.
Screen Open 1,640,200,2,Hires
Flash Off : Curs Off : Hide : Cls 0
'This is where the text you want converted
'should be printed 1 2 or 3 lines.
Print " AMIGA"
Print "SHOPPER"
Print " & AMOS"

Screen Hide 1

'need to open screen 0 as a hires screen, to
match screen 1
Screen Open 0,640,200,2,Hires
Screen 0
Curs Off : Flash Off : Hide On : Cls 0

'set screen colours
Palette 0,$FFF
Pen 1 : Paper 0

'Use the Point function to detect each character
'Print a "*" in its place and store a 1 if a
character is
'present in that position.

For ACROSS=0 To 60
    For DWN=0 To 30
    Screen 1
    C=Point(ACROSS,DWN)
    Screen 0
    If C>0 : Locate ACROSS,DWN : Print "*" :
T(ACROSS,DWN)=1 : End If
    Next DWN
Next ACROSS
Cls 0
'Print the logo
'Move through the T array
For J=0 To 30
For I=0 To 60
A$=""
'If a 0 is found print a space
If T(I,J)=0 : A$=" " : End If

'If a 1 is found print a "@"
If T(I,J)=1 : A$="@" : End If
'You can change the character to be used in the
line above
'to any printable character you want

'Store the resultant text in _text$() array
_TEXT$(J)=_TEXT$(J)+A$
Next I
Next J

'Print the newly constructed logo
Locate 0,0
For I=0 To 30
Print _TEXT$(I)
Next I

'Allow user to save the text as an ASCII file
Show On
F$=Fsel$("","","","Enter Filename To Save")
If F$="" : Edit : End If

Open Out 1,F$
For I=0 To 30
Print #1,_TEXT$(I)
Next I
Close 1
Edit
```

AMOS snippet

In a recent AMOS tutorial I covered ways to hide that your program had been written in AMOS. Here is another little giveaway feature of AMOS that you can change.

To multitask an AMOS program the user has to press Left-Amiga and A. The standard Workbench keys for doing this are Left-Amiga and M.

You can easily change this through the AMOS Pro Interpreter setup menu, see the 'Set system Configuration, page 2' menu and under the 'AMOS Workbench/flipping' type in 'M' instead of 'A'.

Hex dumping in AMOS

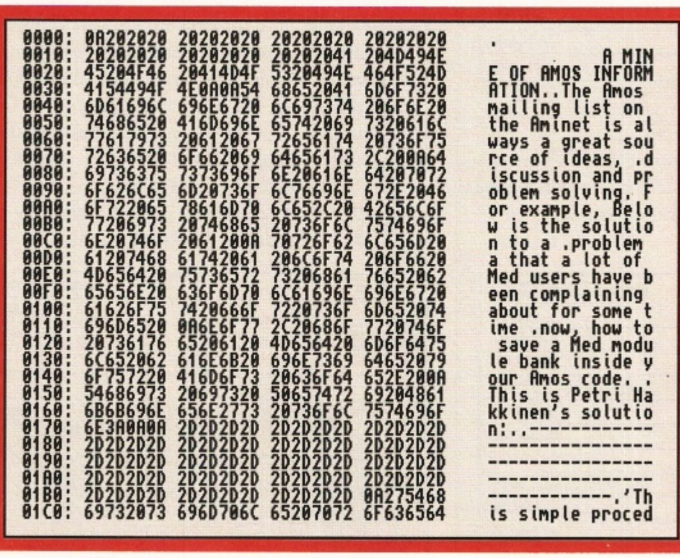
How do you perform a Hex Dump of a file in AMOS Pro in two lines? (See the pic below if you're not sure what a Hex Dump is.) Not possible you may say, unless of course we cheated! Once again, AmigaDOS can be used as the workhorse to do all the complicated stuff for us, and quickly too.

Most occasional AmigaDOS users probably won't be aware that the "Type" command in their "C" directory is not just able to display text files, but it is also capable of doing a Hex Dump of any type of file. So, all we need to do is execute "Type" and give it a file to work on, not forgetting the "Hex" parameter on the end, like this:

```
Exec "type ram:Test hex >Ram:hex.dump
```

The above line presumes you have a file (text or binary, it does not matter) in RAM: called "Test". The ">" is the redirection sign and I have redirected the output of "Type" to the RAM disk. A text file will be created there called "Hex.Dump".

All the work is done in a fraction of a second, if the file was reasonably small. We now need a way to display the Hex dump in a readable fashion. The easiest is to use AMOS Pro's "Read Text" command:



Perform a Hex Dump with ease with a little help from AmigaDOS.

```
Read Text "ram:hex.dump"
```

And there you have it. Of course the user won't be able to edit the file and save it back out again. You could achieve that if you called a text editor like "MeMacs" and passed the "Hex.Dump" file to it. The user could then edit and save the file as much as they wished.

I'll be back!

Next month will be the last instalment of this six-part AMOS tutorial.

If you would like to see the AMOS tutorial back for another run then please write in to the Editor at the usual address and let us know. Tell us what you think of the tutorial so far and what you would like to see covered in the next series. ■

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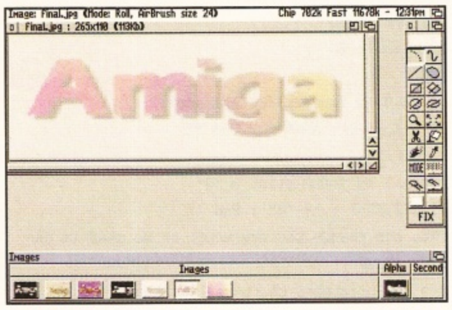
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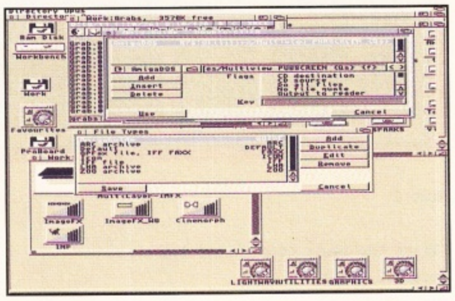
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There can't be a single Amiga owner who isn't aware of this powerful package and the incredible impact that it has had on the Amiga scene. The most talked about image manipulation package ever also gives you the creative freedom of a traditional paint program. Check out our Photogenics tutorials (AS48 to AS54) and find out what this great program can do (for back issues, call ☎ 01225 822511). And you could, of course, get hold of Amiga Format issue 69 and try out the demo on the Coverdisk.

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Directory Opus 5

save £10

The latest incarnation of this powerful and well-designed file manager received 92 per cent and an AS Star buy award in issue 51 (for back issues, call ☎ 01225 822511). Directory Opus 4 was brilliant and version 5 is no exception. Now this program can be yours for £10 less than the RRP of £59.99.

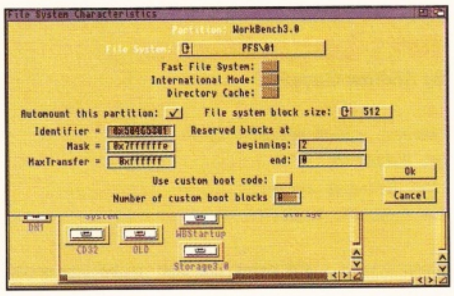
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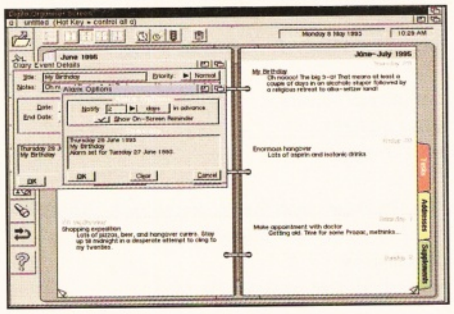
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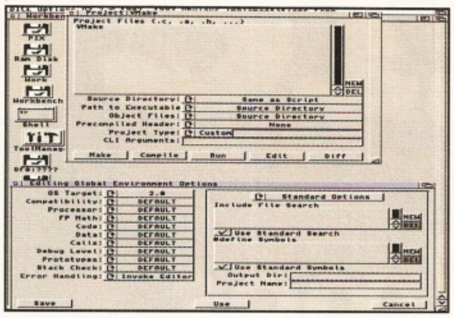
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An Amiga Shopper Star buy, after using this program you'll wonder how you ever kept your appointments in order. Easy to use, but full of features, this is truly the king of electronic filofaxes.

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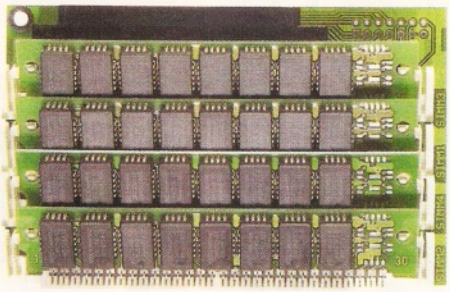


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Save over £30 when you buy the complete version of our DICE Coverdisk from issue 47. The full package comes on five disks, with a 450-page manual, and new features, including: no limit on the number of procedures in each file; a revision control system; link libraries for 1.3, 2 and 3; extra link libraries; higher maths functions such as FPU; support for bitfields, pragmas, etc.

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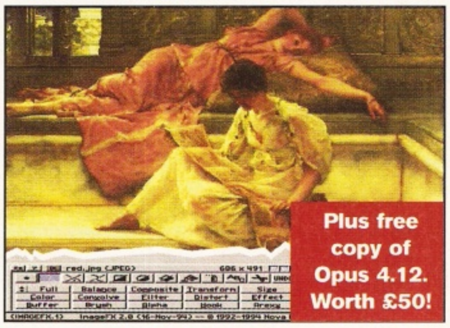


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David Taylor *finds that the PD and Shareware world is continuing to produce some excellent utilities and programs. The following is just a selection of the ones we received this month.*

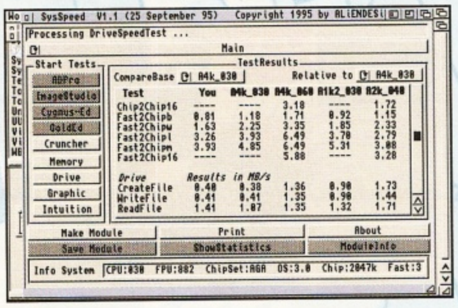
There are over 30 new programs and utilities reviewed and rated here this month. And if you're looking for a particular type of program, we have provided a quick reference guide in the box below.

SysSpeed

Whenever a new piece of kit arrives, it's time to get out the system analysers and see what they make of the new accelerator or new hard drive. But they aren't always accurate and don't reflect how the system performs in practice. Therefore, if you get a program and decide you want to use it to test your system against others, you won't discover the truth. This is the reasoning the author has behind releasing yet another system analyser.

SysSpeed requires MUI and needs installing, but can then be used quite easily. There's a preference screen that enables you to set the tests to be done and define which results from other machines you want to use for comparison. The program tests everything from graphics speed to disk speed and could be likened to SysInfo in that respect. From all the programs of this type, I would recommend SysInfo, this one and WSpeed (on this month's Coverdisks).

Verdict: 90% **Star buy**



SysSpeed offers a massive number of system tests to check your Amiga's performance.

Carnal

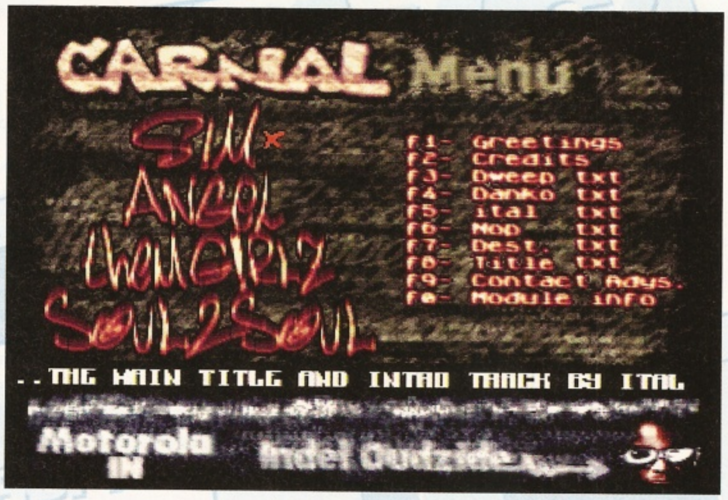
This two-disk set has a neatly coded animation that spins whilst you choose one of four rather large music modules to listen to. The modules are large because they are all remixes of famous disco songs and are therefore reliant on

Who, what, where, when, why, how...

Product	No of disks	Type of product	Price*	Supplier	Contact	Verdict	Page
SysSpeed	one (3969)	Utility	£1 + 50p	17-Bit Software	01924 366982	90%	76
Carnal	two	Music modules	£1.50 + 75p	Online PD	01704 834335	80%	76
Flavour	one	Demo	75p + 75p	Online PD	01704 834335	70%	77
DdBase 7.3 & Invoicer 2.42	one	Applications	90p + 50p	Roberta Smith DTP	0181 455 1626	90%	77
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Roswell Demo AGA	one	Demo	75p + 75p	Online PD	01704 834335	20%	79
SuperView 5.10	one (3974)	Application	£1 + 50p	17-Bit Software	01924 366982	88%	79
DBase 3	253K	Application	n/a	aminet/biz/dbase/	db3.0.lha	90%	80
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Guoule	two	Music	£1.50 + 75p	Online PD	01704 834335	90%	81
Scout 2.3	one	Utility	75p + 75p	Online PD	01704 834355	95%	81
Discovering America	one	Educational	75p + 75p	Online PD	01704 834355	80%	81
Enigma II	one	Utility	75p + 75p	Online PD	01704 834355	90%	81
Virus Workshop 5.8	one	Utility	75p + 75p	Online PD	01704 834355	95%	82
Raw Issue 9	one	Diskmag	75p + 75p	Online PD	01704 834355	85%	82
Remdate 2.2	one	Application	75p + 75p	Online PD	01704 834355	93%	82

Some prices listed here include postage and packing charges; buying more than one disk from a PD house is likely to reduce the price per disk; check compatibility of the program with the PD House before purchasing. More information on all the PD Houses and their prices can be found in the PD Directory on the Coverdisks.

There are only four very large music modules on Carnal, but they all are good – so is the interface.



samples. They have been compiled very well and should please those who like music with a "beat", although they aren't techno.

Verdict: 80%

Flavour

This is a short demo offering some rather neat effects and reasonable music. As the coders admit, the demo scene has gone a little cold of late with only sporadic releases. This isn't the best demo ever, but it brightened up the screen for a few minutes.

Verdict: 70%

DdBase 7.3 & Invoicer 2.42

You may remember seeing earlier versions of both of these programs on our Coverdisk and Subscribers disk back in AS53. Well, the author has continued to develop them and has added new features.

The database is still one of the best around and has had things like simple text editors and readers added for the external fields, to improve and speed up the program. The nice thing about DdBase is that you enter all the fields and design the database from within the program itself. There's no need to enter the data via a separate program as some other PD databases require. The improvements are welcome and it has now reached the point where DdBase is simply being tweaked, with new features adding more power instead of more essential options that might have been missing.

The Invoicer is another fine program. In essence it is pretty similar to a database. Although it's quite simple to use, I had a few problems. Still, it's an easy way to automatically generate invoices, which would suit individuals or small businesses, but wouldn't be adequate for larger companies.

These two programs are worth checking out if you need cheap business software.

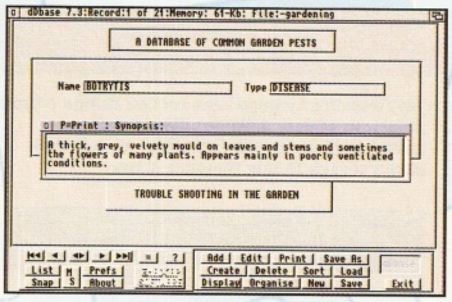
Verdict: 90% Star buy

SeenPoint

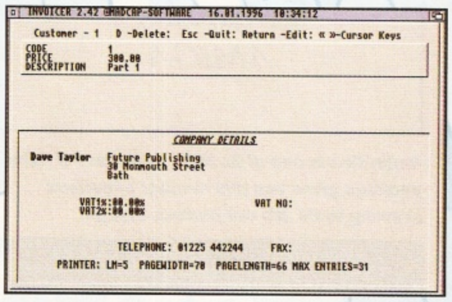
SeenPoint is a diskmag for "scene" coders – you know, demos and intros. The presentation is very nice and the interface shines, but the content left me a little cold. There were too many errors, which detracted from the overall slickness. There aren't that many articles here either. Still, it is the first issue, so maybe we will see it grow.

Of the articles included, there are a couple of interesting ones about idiot right-wingers and one on thoughts about the Amiga's future. If you're into coding demos, you might want to check this out for more information on the English scene.

Verdict: 70%



DdBase 7.3 offers an interface that will attract novices and low end users.



Invoicer may not be everything you want, but it is unique and therefore your only choice.

Video Gold

The following disks are divided into five volumes, with each volume addressing a different theme. On each of the volumes you'll find a set of IFF animations and still pictures for use with video work. The idea is that they save you a lot of time titling and creating anims yourself. As such, they should help out the beginner, or the video enthusiast who can't create their own pictures.

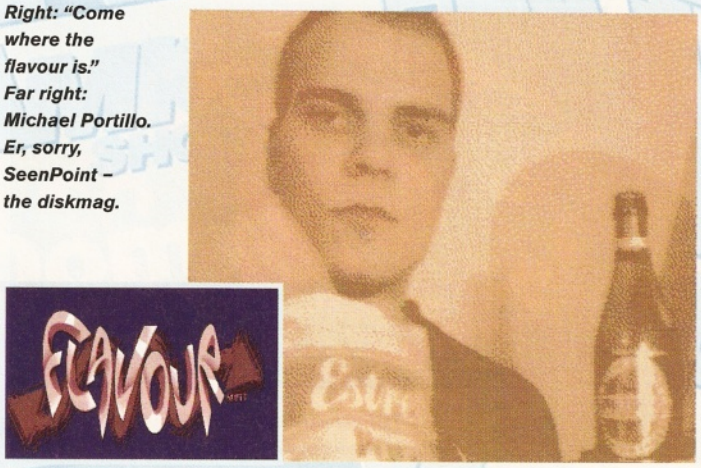
Volume 1: Wedding

There's a real mixture of quality on here. Some of the images could be used in conjunction with an amateur video of a wedding, whilst others should be reserved for the weddings of relatives you hate.

I have a mental picture of a bride in floods of tears when she sees the video that the groom's mate has hammed together. I think the secret of success with these offerings is that less is more.

Verdict: 70%

Right: "Come where the flavour is." Far right: Michael Portillo. Er, sorry, SeenPoint – the diskmag.





Licenceware

This month's Licenceware section brings a broad selection of very different titles together. Everyone should find something to suit their purse strings in this treasure trove.



Reflection is one of its kind. No other PD paint package gives you this number of serious drawing tools. It's not perfect, though.

Reflection

The blurb reckons that this program was originally intended for commercial release, which I think would have been a tad ambitious. However, as a Licenceware release, it's unique. There are, to my knowledge, no other paint packages available that aren't commercial. Sure, there are a couple of half-hearted Shareware packages, but nothing that could be used seriously. Then there are paint packages designed for kids or for playing around in, like Magic Paint Box, but there aren't any that could be used seriously as straight paint programs.

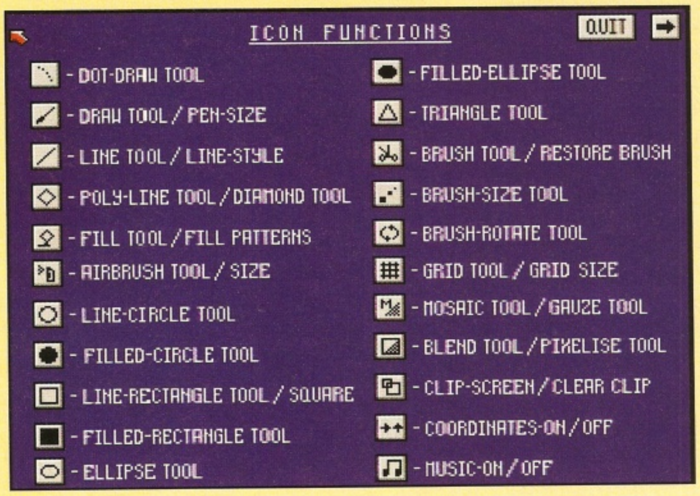
Reflection offers many of the icon tools from programs like DPaint as well as quite a few ones that aren't. OK, it doesn't have some of the more sophisticated animation or morphing tools, but it does offer most of the necessary painting tools. Reflection's layout is easy to use, although the moveable bar and loader requesters give away the lower-end nature of the program and could do with tweaking to give the package a more professional feel.

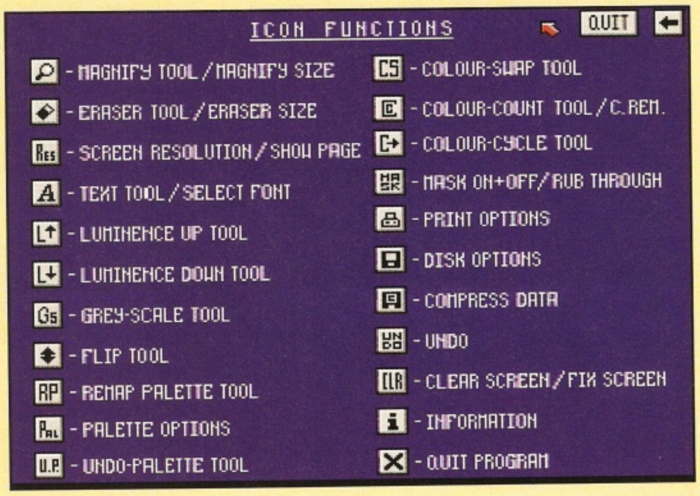
I had one or two problems when using Reflection – it seemed to lock up and it can only deal with IFFs (and then only up to HAM). It comes with a data disk that contains a couple of example pictures and, bizarrely, some empty directories. The program can play music modules while you paint, and on the data disk is a "modules" directory, but with nothing in it! Still, despite the minor polishing that needs doing (and who knows, may have already been done when you read this), Reflection is an original and competent offering. You don't get these features from any other program for under a fiver.

Verdict: 85%

PowerText

The quality of the Licenceware applications appearing recently has reaffirmed the Amiga's position as the home computer that offers inspired products at realistic prices. In the area





Volume 2: Parties

Most of these pictures are for birthdays, although there are some designed for retirements. The quality varies from better than average to absolutely dire. There are, it strikes me, various uses for this volume. Firstly, for younger kids who love the way it all looks. Secondly, for older kids you want to embarrass. Finally, if you're a youngish student-type, you can create a video that will have everyone howling. If you're interested in any of these, it's well worth the cost of a couple of disks.

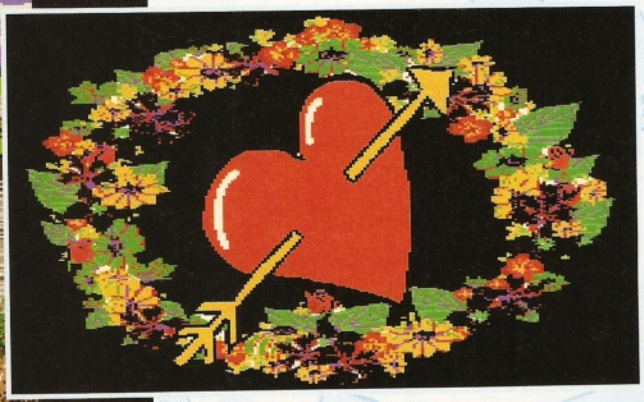
Verdict: 85%

Volume 3: Winter

This is a sort of Winter festivities set. There's stuff for Halloween and Bonfire night, but most are for Christmas and New Year. Some of the animations are useful, whilst others, erm, aren't. A couple of the Christmas anims are impressive, but others are simply text in fancy fonts done in DPaint. Some of the animations are morphs of pictures to text done also in DPaint. Not bad.

Verdict: 85%





Some of Video Gold's pictures are OK, and others can be used as revenge on your children.

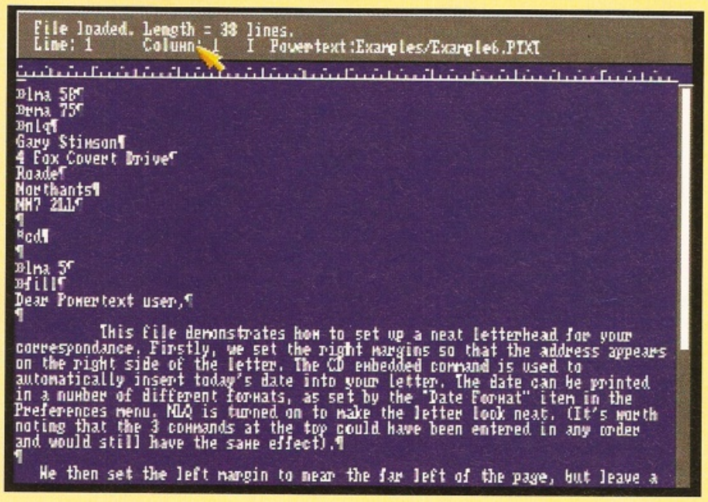
of word processors, there are now three or four really useful products, like EdWordPro or Text Engine.

PowerText is another fine effort, although it doesn't equal its rivals. It looks very similar to earlier versions of Protext and offers all the features you would expect from a text processor. There are the usual load and save as ASCII options, Find and Replace and even a dictionary. But here's the problem, the dictionary crashed my machine big time every time I used it. I had to do a cold reboot to get my Amiga working again.

With that in mind, until PowerText is tested with different machines I have to recommend one of the other Shareware programs, which might cost a little more, but have more features and are much more stable. Also, coded in AMOS, this program doesn't allow you to swap back to Workbench, which is frustrating.

Verdict: 45%

PowerText is OK, but it has been left standing by other Shareware programs.



Intuition Extension

Blimey! We're getting so much stuff for AMOS programmers these days. And from the feedback we get from our readers AMOS continues to be one of the most popular programming languages around. As you can see from this month's Coverdisk, procedures and extensions are very much in vogue. This extension includes a new library that allows programmers to access Intuition from AMOS. There's a full guide to the usage as well as an example program with source code.

I would have thought that the price (see box on page 76 for details) makes the Intuition Extension an essential buy for AMOS programmers. And yes, if you're wondering, this does perform much the same function as the commercial IntOS.

Verdict: 90% Star buy

ABGW 3 Vol.4

This is the latest offering in a series designed to get beginners up to speed with the Amiga's Workbench. In fact, this issue deals mainly with AmigaDOS and how to use the CLI commands. It offers quite a lot. There are two disks archived on it, which are bare minimum Workbench disks for those who aren't sure which system files are required.

The tutorial itself can be loaded by booting the actual disk. This tutorial appears as AmigaGuide text, so you simply point and click. It covers all the standard CLI commands, which are the ones that you need to know and has a very brief section on some PD commands.

It would have been nice if that section had been longer, but apparently there wasn't enough disk space. However, the disk is supplied as OFS, not FFS, and given that it's designed for Workbench 3 users, the use of the WB2+ disk system would have given the necessary space.

However, there's still plenty of other things to read. There's a look at archivers, what they do and how to use them. The author also examines the Coverdisks of the major magazines and puts their, and our, archiving procedures under the spotlight. Obviously, I was very interested in reading that part and, well, let's just say I was happy with his conclusions.

Also on the disk is an extractor program written by the author for people to use with archivers. It's competent, but some of the others discussed by the author offer better interfaces.

On the whole, this volume covers a pretty large area and does so well. It does more than just look at standard AmigaDOS and goes into details of scripts and redirection. Given that printed books on the subject cost over £20, this disk is very good value, because it should help you get much more out of your Amiga and so up your own productivity.

Verdict: 85%

Volume 4: Children

This is a really bad title. There is perhaps one animation that doesn't make you cringe, but the rest are real no-hopers. There are titles for everything from First Words to In the Park and to be honest, to use these on your child's video, you'd have to have a real vendetta against them. Do everyone a favour, get the party volume and use the pictures from there.

Verdict: 20%

Volume 5: Holidays

There are one or two animations on here that don't really fit into the holiday theme, but the rest are some of the best offerings of any of the volumes. The "Day to Remember" text animation is good and the quality of the still pictures is especially impressive.

At the end of the day, you might be able to find better pictures on BBSs and Aminet, but it's hard to find one on the specific theme you require. This at least solves that problem. OK, some are tacky, but I'm sure you can find something of use.

Verdict: 90% Star buy

On the whole, I think that some of the pictures are out of date (having the year "92" on them is a giveaway), but you're likely to find something of use which justifies the minimal cost. The collection could be better and tighter. Although the disks are full, you could easily cut off some of the worse ones and replace them.

Roswell Demo AGA

This is going to be a quick and easy review. Remember the Roswell Incident, footage of a real alien being dissected in top secret laboratories by military personnel (or cheap sixties Hammeresque tat, depending on your viewpoint)? Well, here's some digitised footage that's been compressed and slapped on a disk.

This demo is OK, but a bit pointless. It reminds me of a demo produced by Fairlight a couple of years ago that had a pretty cleverly digitised person walking into a shop. Except that that was much better than this. Sorry, I can't see the point. Fine, it's a digitised, 30-second clip from the film. So what? It could have been made more interesting by combining elements and taking the theme as a basis for a complex demo.

Verdict: 20%

SuperView 5.10

There have been a couple of updates to SuperView since we covered it last. This disk has the latest version of the program, which is all archived up so that it fits on to one disk.

SuperView is a very powerful tool and one that most graphics users should take a look at. It is easy to install, but you should be aware that the SuperView library and program (you need to install both packages), are rather large. They also take up quite a lot of memory when you load up. Still, it offers fast loading and



"Pa! Look, it's one of those real-life aliens. It looks real mean. I'm scared, Pa."

Internet Select :-)

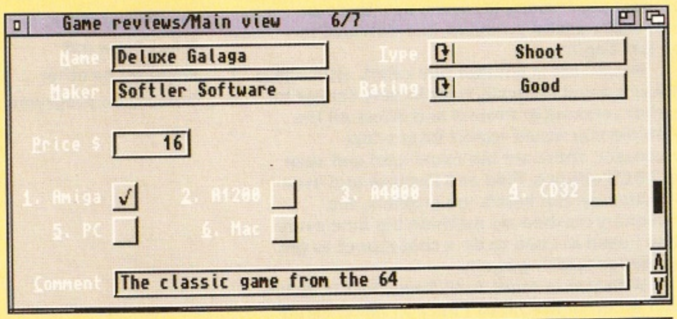
It was a real dilemma this month as to what to cover here. I have decided to just talk briefly about a few of the useful programs and utilities that I've come across.

DBase 3

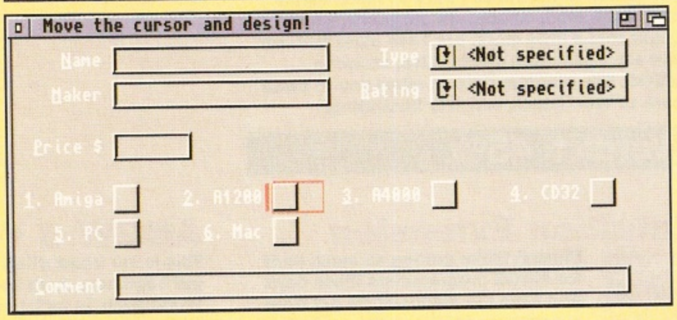
This is the new version of the database program that was included on AS56's Coverdisks. As the author promised, a GUI has been added to help you design your databases. This demo now has the save function disabled, but is worth checking out if you need a cheap business package. It offers quite a lot of power and has several advantages over the DdBase reviewed also in this issue. However, it also has some shortcomings in comparison. The ease of design in this is countered by the ease of input in the other. Still, it's easy enough for you to make you own mind up.

Source: aminet/biz/dbase/
Archive: db3.0.lha

Verdict: 90% Star buy



DBase 3 offers a configurable interface that looks professional.



DBase 3 even has a GUI for use in designing the database.

Zip Mount

Zip Mount is a very simple archive. It contains the mountlists for Zip drive disks formatted as Mac or PC. You need to have CrossDOS and CrossMac to be able to read them, but this is a must for such users. It means you don't have to figure it out for yourself.

Source: aminet/disk/misc/
Archive: ZIPMount.lha

Verdict: 90% Star buy

EmbedIFF

This is a rather neat idea that is worth looking at purely for its novelty. It allows you to encrypt data by embedding the text or whatever within a 24-bit IFF. It tries to keep the picture as close to the original as possible, but several modes are available which allow larger files to be encrypted within the pictures, but cause more corruption. Fascinating to use.

Source: aminet/util/crypt
Archive: EmbedIFF2d.lha

Verdict: 80%

Iconify Gadget

This is a beta test version of a neat utility which adds an Iconify gadget (surprising, eh?) to windows and programs in the MUI way. The author expects there to be bugs, but I found it worked OK. Hopefully, the bugs will be tracked down and we'll see a version everyone can use. I think it's a great idea because I'm always cluttering up my Workbench. Download it and give it a try and do remember to report any problems to the author.

Source: aminet/uti/misc.
Archive: IconifyGadget.lha

Verdict: 90% Star buy

Hidden within the redundant bits of data in this picture is a text file. Cool.



conversion of most picture file types and can load largish images. There are also actions that can be performed on 24-bit data and even used to capture screens.

SuperView offers more than just a basic picture viewer, but then again it should considering the size of the package. The downside was that I crashed it a few times.



"Now Junior, didn't I tell you? If you spoke like that again, I'd have to beat you."

SuperView is definitely worth investing in; although you may still use something like Fastview for day to day picture viewing, you'll find SuperView of use time and time again.

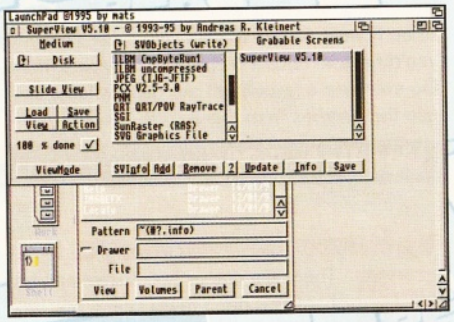
Verdict: 88%

Magic C64

Software emulators are rather nifty programs that allow you to run other programs from different machines on your Amiga. Sometimes these can be put to practical use, while some are just for a bit of memorabilia.

This C64 emulator falls into that category, but nevertheless is still impressive. It offers different screenmodes, the chance to open the emulator as an Amiga Screen; it can load most types of C64 programs that have been converted for use with PC C64 emulators.

Yes, this is one of the best emulators around. It's simple to use and, as far as I could tell, stable. It requires Workbench 2 and an 020, but has the choice between



SuperView 5.10 has seen some improvements and should be on most people's machines.

using real ROMs read from the C64 or its built-in versions.

Verdict: 90% Star buy

Picture This 2!

There are five graphics-related utilities on this disk. Two of them are fast and useful picture viewers, FastView and Visage. Both are faster

than Viewtek and display better results. FastView was included on our Coverdisk in AS58. I like both and use them myself.

Then, there's Kaleidoscope, which is a bizarre program that converts files into kaleidoscope pictures. It's totally useless and not very attractive.

PixxMaster is a paint program designed for children. Written in AMOS, it's not bad and will keep the kids entertained for a while, but it pales drastically in comparison to the likes of the excellent Magic Paint Box.

Lastly, there's Universal Glo, which is a universal loader module for Photogenics and includes PhotoCD support. This unregistered version converts all pictures to greyscale, but at least you can try it out. This is a good disk, but aside from the picture viewers, it doesn't offer anything I would consider essential.

Verdict: 80%

Guoule

An AGA collection of tunes packed on to two disks. These are more original works than those mentioned in Carnal earlier. They are easy to use from the custom menu; all you have to do is boot the disk. They are pretty impressive and the two-disk set has seven different modules on it, or does it? If you poke around, you discover that there's also a menu which gives you access to the full 14 modules on the disks. Obviously, the standard heavy beat stuff is here, but one or two of the modules are a bit lighter too. It's good.

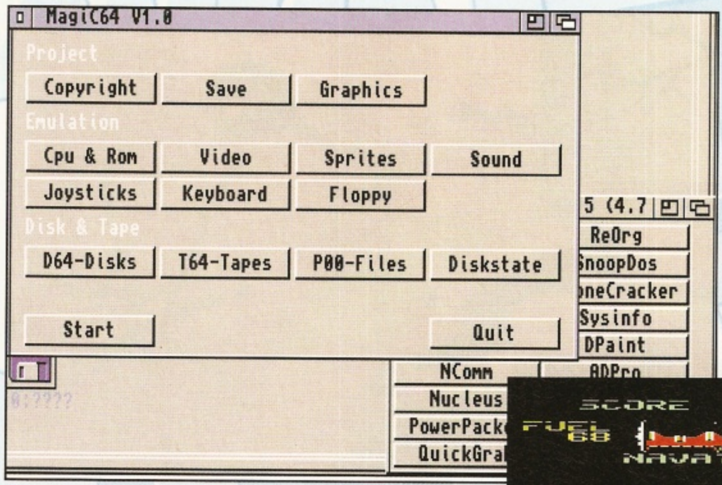
Verdict: 90% **Star buy**

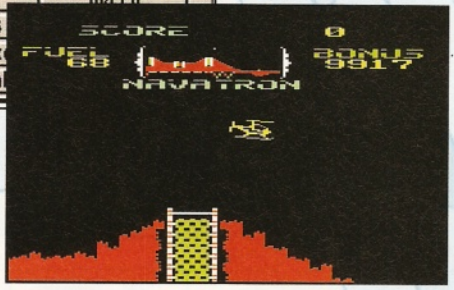
Scout 2.3

Scout allows you to investigate your Amiga's activity. There are quite a few programs that do similar things, but Scout goes further than them and gives you quite a bit of control. Using the GUI requires MUI (and a knowledge of acronyms, obviously), but it's worth it.

There's everything from looking at simple things like assigns and removing unwanted ones to the same for tasks, devices, libraries. Then there's memory and expansion board analysis, resident commands and use of windows. The list goes on. In each area you can ask for more information and usually take some sort of action. For advanced users, this program is perhaps as essential as SnoopDOS.

Verdict: 95% **Star buy**





Magic C64 shows just how competent and versatile emulators on the Amiga are.

Discovering America

This is an AmigaGuide document that contains details about the good old USA. There's information on each State, listing things like population, location, time difference and some general descriptions. It's not exactly in-depth, but makes useful reference material for those who need superficial info quickly.

It will probably be very useful for children who are taking geography at school, but it is not exactly a World Info CD competitor. For the price of a disk, you're getting a lot of information, which will save you a trip to the library when you need to find out what the population of Delaware is. (689,000 if you're interested.) Some pictorial material would have improved this, however.

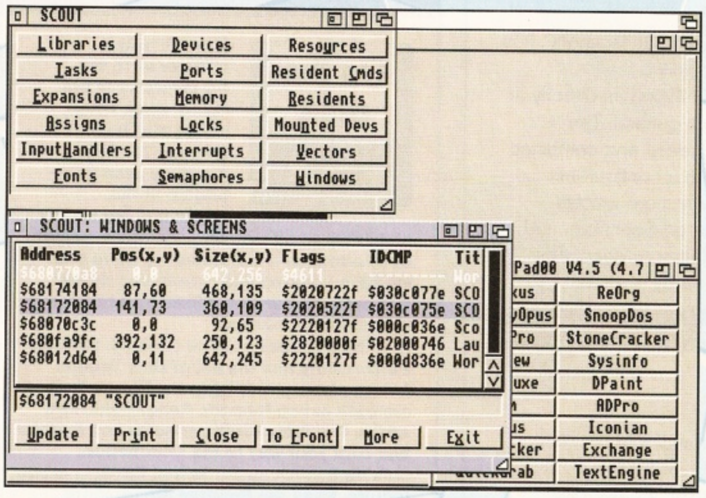
Verdict: 80%

Enigma II

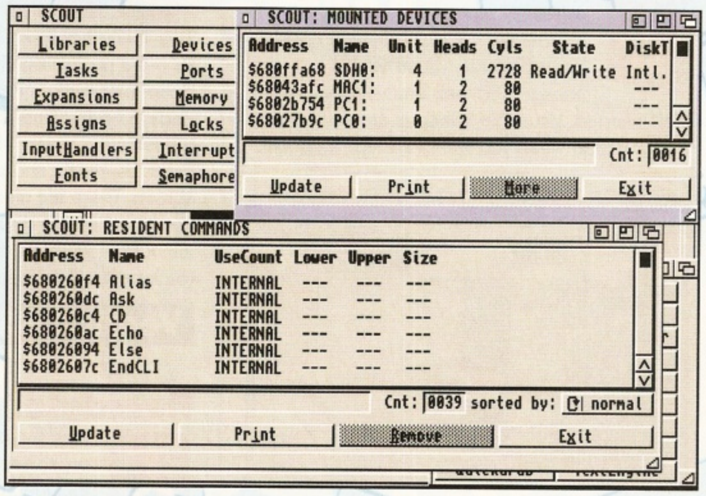
Not a program for the faint hearted. It's a bit of a leap of faith. Enigma II is a protection system for your disks, ideally your hard drive. Unlike other protection systems though, it encrypts your drive itself, not the files on there. So, never encrypt your boot partition.

If you want to try this out, you can install it to a RAD disk first and then see how it works. All you have to do is use the Installer and then encrypt the device with your case-sensitive password. That disk is then encrypted and nobody will ever get any information off it unless you supply a password. And I'm fairly confident that this is true, because seeing it convert a drive to non-DOS, although unnerving, is pretty astounding.

The one problem I encountered with this program was that to un-encrypt, you had to run a script, except that the script didn't have the correct protection flags set, which I worked out and rectified ("protect s:enigmaii +s", in case anyone is having in trouble). From now on the



Scout can examine and influence almost every aspect of the Amiga's system. Here the windows and screens are shown.



Here Scout is showing the resident commands and the devices mounted on the system. As with other options, I can choose to remove some.





Raw is now on issue 9 and has masses of articles all presented with a good interface, mixing music graphics and text.

disk is non-DOS every time you boot up until you unlock it.

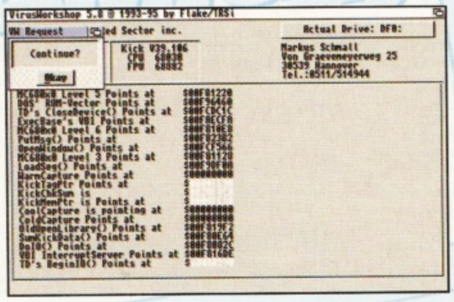
This program is very impressive. However, I'm not going to guarantee that it is 100 per cent safe – encrypting disks to non-DOS has its inherent risks. If you need data protection, then this is the one that nobody will crack.

Verdict: 90% **Star buy**

Virus WorkShop 5.8

This is a new release of the extremely powerful virus exterminator. The program is not like Virus Checker, which sits as a background task examining every disk inserted. Virus WorkShop is an application that you load when you want to check a specific disk, or when you know you have been infected and want to remove the virus. This new version has had several new viruses added and can now recognise over 300 bootblock viruses and 300 file viruses.

It's strange then that it still doesn't know what a disk with no bootblock is, but there you go. There's always the possibility with any program of this type that it might get it wrong and mistakenly identify a virus, but Virus WorkShop is one of the best programs around and every serious user should have a copy. More importantly, you should always have the most recent copy, because otherwise it becomes a bit pointless. A virus checker that you haven't updated for years is nearly as useless as not having one at all.



Virus WorkShop is a must for every serious user. This has all the latest viruses added.

Verdict: 95% **Star buy**

Raw Issue 9

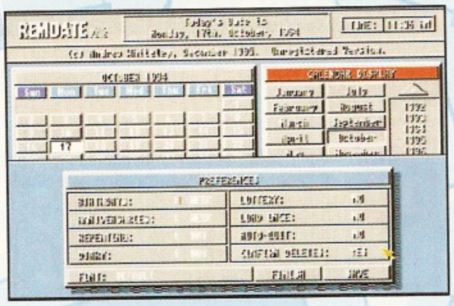
This is another diskmag aimed at "sceners". It is far more professionally compiled than SeenPoint, although it isn't aimed as directly at English coders and is more general. The presentation is very slick indeed and combines graphics, music and text on a configurable screen. There are also many more articles contained on the disk than on SeenPoint and although it won't be of interest to general readers, it will be lapped up by sceners.

Verdict: 85%

Remdate 2.2

This is a new version of the organiser program that was included on AS58's Coverdisk. This version has plenty of new features, including the ability to incorporate files from other organisers. There are search facilities and address books as well as unlimited diary entries. The look of the program is similar to the previous version, although I found it even easier to use this time (maybe that's me).

Remdate 2.2 isn't as visually imposing as the more literal interpretations of filofaxes, like Digita's Organiser or the Shareware EpochMaster. Still, it's a great program. ■



Remdate has been updated and includes some new features, including the importing of other formats.

Verdict: 93% **Star buy**

PD submissions

If you have some exciting PD disks that you would like to be considered for review in PD Select, send them in to Amiga Shopper at the usual address, clearly marked as a PD submission. We welcome any type of disk, except games.

If you are a PD house, make sure you include all the information necessary, such as how to contact you, how much the disks cost and how people can pay.

If you are the author of the program, state where people can get your program from, and whether you would like us to consider it for inclusion on a future ShopperChoice Coverdisk.

Information about new PD houses or PD authors is accepted for inclusion in the PD directory – see the box below for further details.

The PD directory

On the disk

You will notice references to the PD Directory in the "Who, what, when, where etc" boxout on page 76. This directory used to be printed in the magazine, but had to be in very small text because of the amount of information it contained. To solve this, we have updated and recompiled the list and put it on our Coverdisks as a text file in the InformationZone.

The InformationZone contains both the PD Directory and the list of User Groups (which also used to be in the issue). They are both in two formats, AmigaGuide and ASCII. The AmigaGuide enables you to point and click your way to the information, making it much easier to find the details you require. Read the ReadMe file for more information. See page 10 for details.

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Talking Shop

This month in Talking Shop: Amiga developments; a happy subscriber; what's happened to AMOS?; a few feature ideas; a new Amiga club and the fate of the Aiwa ACD-300 CD-ROM drive...

The news this month is that Amiga Technologies UK are moving from their Maidenhead offices into the Escom building near Stansted Airport. They say it is because Escom's offices are more spacious and prestigious than their old offices. Surely, having the two companies side-by-side can only be a good thing. What do you think? Write in and tell us.

Amiga power

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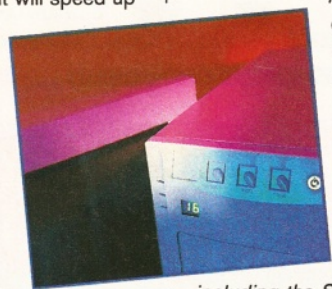
It's yet another one of those periods in the Amiga's history where there are so many exciting new developments that you've just got to read the news sections in all the mags to learn more and more about what's going on.

It seems that AT have got their heads firmly screwed on, have respect for the Amiga technology and want to make the killer machine for the Nineties that it was in the Eighties. The porting of Amiga OS to other computers is something that should have happened years ago, and the news that the Amiga is going to get a RISC boost is nothing short of heartracing.

Phase 5's new accelerator cards should be the hardware that everyone gets for his Amiga. Anyone thinking about buying an accelerator should now save their pounds and get a PowerUp board when they are released. I've read that Phase 5 will be offering an upgrade path to existing Blizzard accelerator owners and I will definitely be taking advantage of it. Don't just wait and see if they'll take off, folks. Do the machine you use a favour and be one of the people who will make the numbers count! Let's make the basic Amiga configuration a Power Amiga!

Now, I don't understand what goes on behind the scenes of the various software houses to make a software bundle, but if £400 worth of software can be given away with the computer, why not £400 worth of hardware? Wouldn't it be great if AT made a deal with Phase 5 to include a RISC accelerator with every A1200? This would obviously mean that no software could be included in the pack, but with companies like Silica bundling their own software packs with the machine in addition to the standard bundles, who's to worry? Just imagine... A 100MHz Power Amiga for little over £400 with software. That *would* be something.

To make the PowerUp board a success, we need something that will show what it can do. It's not enough to say that it will speed up your Amiga by x times, what is needed to convince people is a visual example of what the beast can actually do. This should also help to convince the general public as to what a Power Amiga can achieve. We know already! So, Escom and Phase 5, do the job properly to the last detail. Find a willing games company who will program some visual, kick-ass game, or even find a demo group and let them loose on the hardware for a few months and bundle this along with every PowerUp board. That way the shops will have something to convince punters to buy.



We've all seen adverts for the Pentium and Intel are doing a great job promoting their processors, but what the hell is Motorola at? Hibernating? I sent a letter to their head office over a week ago asking them if they will be conducting a similar advertising campaign. I also asked if they were planning on promoting the Amiga to however limited a degree, as it will be using their PowerPC processors, as well as the PowerUp board.

As yet they have still to reply, but I think this is a crucial enough point worthy of investigation. Perhaps Amiga Shopper, being influential could do a much better job at squeezing an answer out of Motorola? Surely, this is a mini feature waiting to happen?

Jonathan McBrien
Basingstoke

You are right in saying that it's an exciting time for the Amiga and that news is coming in fast – these days we seem to keep hearing of new developments just as we've finished an issue, which is very frustrating! However, we have some great reviews of excellent new products for you this month, including the Siamese System from Hi-Q and a 1260 accelerator.

Subjects of interest

In our Christmas issue news pages, we asked you to write to Petro Tyschtschenko at Amiga Technologies to tell him what you want from your machine. But we also want you to write in and let us know too.

We want you to tell us what you think of Amiga Technologies, the Power Amiga and all the different Amiga software bundles.

We also want you to tell us what you would like to see featured in Amiga Shopper. If there is any Amiga software or hardware that we haven't covered in the magazine, but that you would like us to review, then let us know! And if there are any tutorials or features you would like to read – tell us!

It is only when we get lots of feedback from you that we know that we are covering what you want to read.

You can contact us by E-mail or snail mail at the address in the box opposite.

For those of you who missed Petro's address, here it is again:

Petro Tyschtschenko,
Amiga Technologies
GmbH,
Berliner Ring 89,
D-64625 Bensheim,
Germany.
Fax: +49 6252 709 520E-mail: gbo@amiga-tech.de

A happy customer!

Just a short E-mail from a silent Internet surfer and a dedicated Amiga Shopper subscriber. I just got my February issue of Amiga Shopper and opened up the magazine to find the exclusive blue disk fall into my lap and tempt me to insert it into the disk drive. I came across the wonderful programs called Interplay 4 beta and FastIprefs, which has transformed my Shell. Interplay 4.0b has made me throw out my YACP and I have been dying to get rid of it for ages in preference for something else.

Keep putting on those lovely utilities and updates to existing programs to make my A1200 faster, smoother and more efficient. Well done to the Amiga Shopper team and Amiga programmers.

Kevin Henry
E-mail

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All the letters received at these addresses will be considered for publication, unless you specifically advise us otherwise.

Thanks for your kind words, Kevin. We think that you will be even happier with your Subscribers disk this month – Dave has packed loads more excellent programs on to it to make the grand total of stuff on all three of our disks this month over 9Mb! To get hold of the third free subscribers-only disk, you need to subscribe now. Call our order hotline on ☎ 01225 822511.



The ultimate hoax?

I have been told Ultimate Software is no more. It was apparently a hoax by Joe Jenkins, who also ran Amiganuts (which is also no more). Is this true? It is very disappointing since there are many loyal AMOS users on my mailing list (E-mail) who would have many suggestions for improving AMOS Pro.

Michael Cox
E-mail

Since we published the story about Ultimate Software in the news pages of our Christmas 1995 issue, we have checked with Europress, the original publishers of AMOS. Europress say that they have not given Ultimate Software the licence to produce AMOS. We printed the story in good faith, after Ultimate Software sent us a press release about AMOS.

However, AMOS Pro Compiler 2 is available from F1 Licenceware (☎ 01392 493580).

Bloody PCs

I refer to your January issue coverage of your Web pages. My only complaint is that you actually used a bloody PC to grab the screen image. Why, if the Amiga is so great, would you want to use a PC? And Windows at that! (p26, issue 58). To quote page 27, "The Amiga has the most efficient multitasking OS on any platform". Nuff said.

Santa Claus brought me a modem for Christmas. I have since easily managed to log on to BBSs, both uploading and downloading files. Yet, Santa didn't leave any decent software to access the Net. I know that the Amiga is capable of accessing and displaying Web pages, but I'm buggered if I can get the software to work. I am currently struggling with Demon's AmigaNOS software. Although I can E-mail, and ftp now and again, I am having trouble trying to get AmiTCP and AMosaic to work.

How about a feature, starting from scratch, showing how to obtain, install and use software to access the Net? Please do not restrict yourselves to the AmiTCP/ AMosaic combination. If you can find better software, then please use that instead.

Talking of features. I have three Amigas, (not Amigos), a 1Mb A500, a 6Mb/420HD A1200, and a 10Mb/1.2Gb A4000/ec030, which I use for anything from games, DTP, video titling, scanning and digitising, graphics and now Comms.

I am p*@*d off with the whiners moaning that technology is going too far for their A500's. I (admittedly luckily), have my A4000; yet there are few features geared towards the A4000. It's always A1200 this, A1200 that. For example, which is the easiest, and cheapest way to upgrade an A4000, bearing in mind that the

Cyberstorm is a pain in the bottie to install, and more expensive than the A1200 version...

Further features could include how to get the most out of new purchases, like my scanner, my modem, my digitiser, etc.

How about it Amiga Shopper? After all, you are one of the mags dedicated to serious Amiga users. So why not cater to the needs of users with serious Amigas?

Paul
E-mail

John Kennedy grabbed an image of our Web pages on a PC because the picture was for our Operating Systems feature where he was testing the Amiga, PC and the Mac at the same time. I think we can forgive him for using a PC!

Sales of the A1200 and A4000 are going from strength to strength and Amiga Technologies have already announced plans for a Power Amiga. I am sure they have other development ideas for both machines up their sleeves.

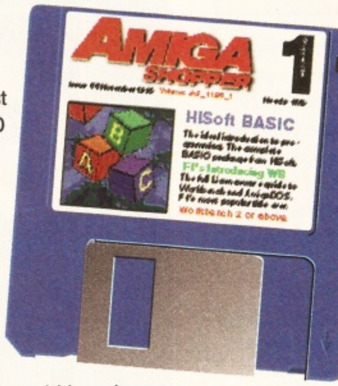
As for getting the most out of products, we always try to help you out in our Supertests by advising you which of a certain genre of products are the best on the market and we will continue to do so. Please write in and let us know which Supertests you found the most informative and which ones you would like to see featured in the magazine.

AMOS overkill

AMOS, AMOS and yet more AMOS. This rather strange form of BASIC seems to get a lot of attention – why? When are we going to get some reviews or tutorials on the far superior HiSoft BASIC 2? The HiSoft BASIC allows total control over the Amiga OS up to Workbench 3.1 with full AGA support, yet the information as to how to make the best of it is extremely lacking. This is a pity as it is a powerful version of BASIC which is compatible with BASICs on other platforms, allowing porting of applications to our favourite Amiga. AS should not ignore one of the most useful programming tools for the serious user.

Amiga Shopper is the UK magazine for serious users, so why not provide more information for electronic enthusiasts? How about a circuit diagram for the A1200? Before you go on about copyright, the C64 came with a diagram! More info on the hardware would be a boon to those able to make use of it. Not everyone is an expert with a soldering iron, but is this any reason to take the Amiga Format attitude and discourage anyone from improving their kit? It is fair to give a warning that any tinkering could be fatal to your beloved Miggy and if you are not fully capable to leave well alone or get someone else to do it for you, but to assume all readers are total idiots is a bit much.

Are AS going to do a review of the PAWS kit which will transform your Amiga to a portable? At least A1200 and 4000 versions are available in the USA. Are they available in the UK, at what cost, and would batteries support a 3.5-inch hard drive? More info on this would be a boon to the serious Amiga user.



W. D. Eaves
Thurso, Caithness

Amiga Shopper was redesigned and relaunched back in March 1995, as you know. The reason we did this was to make the magazine more accessible to a wider range of Amiga users – beginners and professionals alike.

The PAWS portable Amiga kit isn't available in the UK yet and at first look doesn't appear to be worth the money. However, we will be giving it a thorough going over soon.

You will be pleased to know that we are starting a six-part HiSoft BASIC tutorial in our April issue. We are running our AMOS tutorial at the moment simply because many of our readers asked us to do one for them! If anyone has any suggestions for tutorials/features or reviews that you would like to see in Amiga Shopper, please let us know!

Amiga club

A friend and I would like to organise a serious Amiga Users Club in the Huddersfield area and have advertised in free ads for the past few weeks with little result. We wondered if you would give us a mention in your pages.

Between us we have several friends who are Amiga users and we are able to assist each other to a certain extent with any problems we come across but are obviously limited by our knowledge. Our idea of a club was so that we could organise lectures, discussions and projects etc., that would be of interest and benefit to us all including new users to whom the computer environment may appear a little unfriendly (even though we know our computer to be the friendliest around).



If anyone would like to contact us, write to Geoff Milnes at 6 Ochrewell Avenue, Deighton, Huddersfield, West Yorkshire HD2 1LN. Or call ☎ 01484 543534.

Geoff Milnes
Huddersfield, West Yorkshire

Mention given!

Aiwa ACD-300

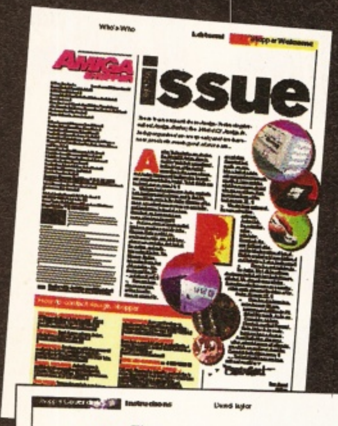
I am just writing to you to give you some information about the Aiwa ACD-300 CD-ROM drive. Aiwa no longer produce these drives. They are no longer available in any of the companies that advertise in your mag, e.g. HiSoft, Siren, First Computer Centre and Gasteiner.

I was desperate to get this drive so I rang Aiwa and asked where, if anywhere, could I get this drive. They told me the last company that had ordered it from them was PC World. The price quoted to me was £166.58 including P&P. So if any of your readers want to get this lovely drive they had better hurry up before they are all gone. I have sent my order in!

Derek Heasley
Dublin, Ireland

I have checked with Aiwa and apparently the Aiwa ACD-300 drive will be available until mid-1996. The reason no one has them in stock is because they have been selling so well. Another company to try if you can't get hold of the drive is Storage Options on ☎ 01483 771555. ■

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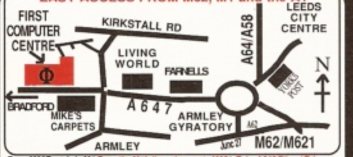
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10/10 December Amiga Computing

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The Ultimate Amiga Drive

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Is it a bargain the size of a Hippo's Bum?. You Betcha!! - Amiga Computing Oct. 1994

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star MICRONICS

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Star LC240C 24 pin Colour — ASF built in, 4 LQ fonts.	£145.99
Star SJ144 Colour — Colour thermal transfer printer, low running costs, 3 p/p/m mono, 1.4 p/p/m colour.	£229.99

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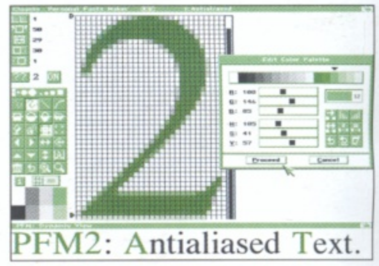
Shopper**disks**

Going where others can only try and follow, Amiga Shopper's Coverdisks contain 6.5Mb worth of commercial programs, Licenceware, Shareware and PD. You need look no further.

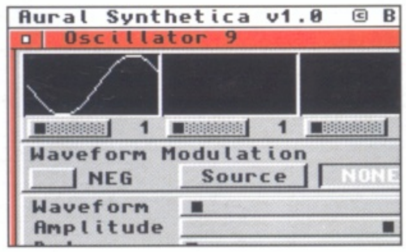


Personal **Fonts Maker 2**

The full program from Cloanto. Personal Fonts Maker is generally accepted as the best bitmapped fonts editor for the Amiga. It is capable of editing and creating fonts of up to 256 colours and yet retains the ease of use you'd expect from the creators of Personal Paint. With special functions for anti-aliasing, the program is a boon for graphics packages and video applications. Retailed recently at £40, this complete program is the business.



Aural Synthetica



From Blachford Technology, the company behind Aural Illusion, this is a demo of the new sample editor. This version has all the features of the complete program with the save disabled. Such is the power of Aural Synthetica, with its modular synthesis design, that it requires a minimum of 2Mb of RAM to run. We also have an exclusive upgrade offer for AS readers.

Shopper**Choice**

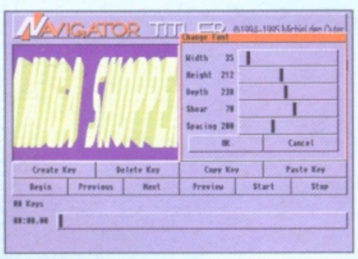
Another Useless Incentive disk? No! ShopperChoice offers the best selection of new PD and Shareware.

Application**Zone**

Navigator 2: three programs in one

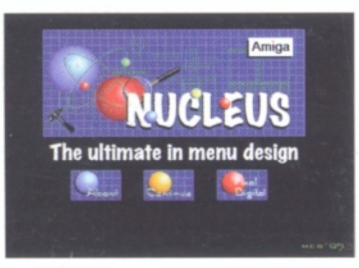
This zone contains all three programs from the Navigator 2 package which was rated a staggering 99% in AS58. The eponymous Navigator 2 itself is a Virtual Reality simulator with many worlds which you can explore every dimension of for yourself. Navigator Titler enables you to create brilliant 3D titling animations with ease; while with Navigator Wiper you can produce similar anims with pictures. Both programs include a VR mode for ease of use. Because of the power of these programs, they all require an 020 processor (A1200 users can therefore use these programs without a problem) and a 15KHz monitor or TV.





Nucleus

So impressed were we by the ease of use and professionalism of this menu and button creation package last month, that we have arranged for this exclusive demo. It is fully functional and can produce Workbench 2 compatible front ends, limited only to a maximum of 10 gadgets and 2 full images per page. The program itself requires Workbench 3.

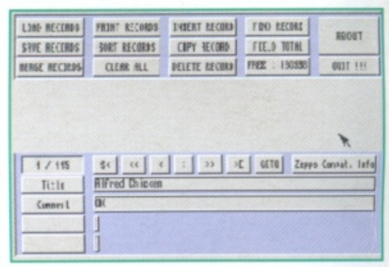


3D**Zone**

Objects for Real 3D (including the Real 3D Classic version from Amiga Format Coverdisk AF77), Imagine and LightWave users.

Plus: *InformationZone and over £20 of disk offers!*

Dialog Procedures 3.6



The complete Licenceware procedure package from F1 Licenceware for AMOS programmers. It enables you to create fully functional button interfaces within AMOS programs. This does require AMOS, but included is a fully functional database program created with Dialog Procedures that everyone can use.

Technical**Zone**

There are 12 essential programs and utilities packed on here – everything from a system tester to a much needed update for Workbench's Execute feature. Includes new CLI commands.

